

# Stray Creek Response to Comments

A letter was mailed to interested parties, organizations, Nez Perce Tribe, and government agencies and a legal notice was published in the *Lewiston Morning Tribune* on October 12, 2019 to announce the combined scoping and 30-day comment period for the Stray Creek project. The Stray Creek preliminary EA was made available on the Nez Perce-Clearwater National Forests website at <https://www.fs.usda.gov/project/?project=53658> at this time along with supporting documents.

## Summary of Public Response

Nine (9) comments were received in the form of emails and letters as instructed in the letter and legal notice before the Stray Creek 30-day comment period ended. Each comment letter was assigned a reference number by the comment analysis data base (Table 1).

**Table 1. List of comments received on the Stray Creek project**

Letter Reference Number	Date	Name/Organization
1	November 8, 2019	Honorable Shannon Wheeler/Nez Perce Tribe Executive Committee
2	October 15, 2019	Jim Gribble
3	October 17, 2019	Daniel Stewart/Idaho DEQ
4	November 5, 2019	Brad Smith/Idaho Conservation League
5	November 5, 2019	Jim Teare/Idaho Department F&G
6	November 13, 2019	Tom Partin/American Forest Resource Council
7	November 10, 2019	Harry Jageman
8	November 12, 2019	R. Skipper Brandt/Board of Idaho County Commissioners
9	November 12, 2019	Gary MacFarlane/Friends of the Clearwater

## Comments

The following section contains specific written comments and their disposition in the environmental assessment and draft decision notice. To minimize duplication, comments addressing essentially the same topic or concern have been consolidated among the various letters. Each comment contains a citation to the comment letter(s) where contained. Specific written comments are defined by 36 CFR §218.2:

Written comments are those submitted to the responsible official or designee during a designated opportunity for public participation (§218.5(a)) provided for a proposed project. Written comments can include submission of transcriptions or other notes from oral statements or presentation. For the purposes of this rule, specific written comments should be within the scope of the proposed action, have a direct relationship to the proposed action, and must include supporting reasons for the responsible official to consider.

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## Comment Summary and Response

### Supportive

1. *I have just read your letter concerning this project, and I strongly support it. as a former logger, I have seen how management improves our forests, and projects like this one are long overdue. Hopefully, it will go forward, and appeal in opposition wont prevail. Obstacles to stewardship projects in the past twenty years have cost us many millions of board feet of timber, lost to bugs, disease, and ultimately fire. While fire has its advantages at times, it should never displace timber harvesting as a management tool. ([2-1])*
2. *We appreciate that you are moving ahead on treatment of areas to 1) reduce root rot, 2) accomplish fuel treatments, and 3) provide economic benefits to rural communities by harvesting timber. ([8-2])*

**Response:** Thank you for your comment.

### Purpose and Need

3. *The Tribe shares the Forest's goal of promoting healthy forest conditions in the Project area and desired watershed conditions as described in the Clearwater Forest Plan. (Clearwater National Forest Land Management Plan 1987, Sec. II at 16-17.). The Stray Creek Project should work towards improving watershed conditions as much as extracting timber. ([1-26])*
4. *The Forest Service claims that "The proposal is needed because stands within the project area are dominated (70%) by grand fir/Douglas-fir mix that are affected and more susceptible to disease such as root rot, and where the composition once was more diverse with a higher percentage of early seral species such as western white pine, western larch, and ponderosa pine that are less susceptible to root disease." But, the agency also states that the disturbance regime in this area is anthropogenic: it is cattle grazing, timber harvest, and fire suppression. PA p. 3. But without referencing actual instances of where the Forest Service has suppressed fire in the proposed logging units, that is a general statement not specifically applicable to this project—it could very well be in a natural fire cycle. Also, the proposal appears to be more timber harvest and grazing to "fix" what timber harvest and grazing created. And, there seems to be areas on the chopping block that haven't had timber harvest in the past 35 years (and likely much longer) according to a satellite imagery of the area with Google Timelapse. ([9-9])*

**Response:** The need of the Stray Creek project is focused on increasing early-seral species diversity across treatment areas and provide economic benefits to rural communities by harvesting timber on lands allocated as timber producing lands in the Forest Plan (management area E1). Root disease is also present in proposed treatment area; increasing early seral species will also improve forest health and maintain

forested cover in the long term. The project complies with all Forest Plant standards relevant to the Stray Creek project.

5. *Science and the Forest Service's own admissions demonstrate that achieving the focus of improving forest health with this project is also highly uncertain and controversial. Your purpose and need do not account for the best available science nor the current climatic period. What is the need to treat for disease when that is a natural part of the forest cycle? Nor is there an economic need for this when a much larger project, Lolo Insects and Disease, has just been approved in this area and has yet to go forward. Demonstrate these needs with science. ([9-8])*

**Response:** The project record has been updated to include references to the most recent and applicable science used to develop the project (Stray Creek EA and document 11-013).

## **Public Involvement**

6. *IDFG would appreciate the opportunity to work collaboratively with the NPCNF as the Stray Creek project is further developed. We have particular interest in project prescriptions and would be happy to provide technical assistance for fish and wildlife within the project area and the larger landscape. ([5-3])*
7. *We greatly appreciated the opportunity to discuss this project and subsequent long-term fisher and elk management in detail with the Lochsa-Powell District Ranger. As offered in our conversation with the Lochsa-Powell District Ranger, we would appreciate the opportunity to be on-site with the layout crew as they assess project prescriptions for the Stray Creek project. Permitting IDFG staff to shadow layout crew members would allow IDFG to become familiar with how project prescriptions and layout are assessed in the field. We support the current Lochsa-Powell District Ranger management objectives for fisher, but we encourage the NPCNF NEPA Strike Team members, interdisciplinary teams, wildlife biologists, and District Rangers to continue discussions with IDFG staff to discuss long-term fisher management. ([5-4])*

**Response:** Thank you for your interest. Arrangements can be made for this to occur as implementation begins.

8. *I am disappointed that the Forest Service has elected to combine the scoping and comment period for this project and only allow only 30 days to comment on the Preliminary Environmental Assessment. It does not help that objections to the 144 million board feet End of the World project must be filed in the same timeframe. This appears to be an effort to stymie meaningful public comment and short change the environmental review process. ([7-1])*
9. *NEPA procedures require the Forest Service to scope its proposed action and take comments on key issues to analyze in the environmental assessment. Then those procedures require the Forest Service to release an environmental assessment and again take open public comment on the issues and analysis. If this is an environmental assessment, then the Forest Service has violated scoping procedures, which could have helped outline key issues. If this is scoping, then we fully expect the Forest Service to release a draft environmental assessment for open public comment, allowing anyone to comment on any issue. This period cannot serve as both—it does not allow the public a full and fair chance to provide input on key issues or assist the agency with its hard look at environmental impacts. One comment period prejudices the public with limited information and it blinds the Forest Service to a hard look at proposed actions. Please remember that the National Environmental Policy Act is not a pro forma exercise with comments to be ignored. ([9-1])*
10. *Based upon the contents of the PA (Even though this document did not contain environmental analysis, the Forest Service called it a "Preliminary Environmental Assessment." Here, we refer*

*to this document as a PA (proposed action), scoping, or, as the Forest Service entitled it, a "preliminary environmental assessment" interchangeably.), the FS has largely committed itself to a course of action well before engaging the public. This is becoming a concerning trend of this Forest. The lack of a full and meaningful involvement of the general public in the process of project development prior to the release of this PA greatly concerns us. The PA reveals many actions the Forest Service (FS) took prior to even scoping the proposal to the full ownership of this national forest—the American public. Part of the earlier narrowly focused public involvement process included meetings with self-selected members of the public who were able, because of their location near the project area, to engage in "collaboration." ([9-2])*

**Response:** The Forest Service requires scoping on all proposed actions. Because the nature and complexity of a proposed action determine the scope and intensity of analysis, no single scoping technique is required or prescribed. (36 CFR 220.4(e)(2)). Comments on the preliminary environmental assessment for the Stray Creek project were accepted for 30 days beginning on the first day after the date of publication of the legal notice per 36 CFR (a)(1)(i).

*11. We are once again disappointed that this proposed project was not reviewed with us and does not incorporate the Idaho County Resource Plan (ICRP) in your planning process. Pages 5 and 6, Economic/Stability of the ICRP would be excellent for you to review. ([8-1])*

**Response:** Please reference to the ICRP in the environmental assessment and decision notice.

*12. Although the Forest Service has called this a "preliminary environmental assessment," it contains no analysis. It only describes existing condition and conclusively states (repeatedly) there would be no impact to various resources. The document has analysis that demonstrates that, and it would appear the public would not see an EA with analysis until the objection period. The Forest Service is cutting itself off from meaningful public review and notice of potentially key issues. ([9-3])*

**Response:** An environmental assessment shall briefly provide sufficient evidence and analysis, including the environmental impacts of the proposed action, to determine whether to prepare either an EIS or a finding of no significant impact (FONSI) per 40 CFR 1508.9. Supporting information was provided on the project website per 36 CFR 220.7(a).

### **Proposed Action**

*13. The Tribe recommends that the Forest clarify and identify on a map all proposed silvicultural treatments and leave patches and analyze the direct, indirect, and cumulative impacts of these actions on aquatic and terrestrial habitat. ([1-4])*

**Response:** Direct, indirect, and cumulative impacts are documented in the EA and supporting documentation located in the project record. Leave patches will be identified during unit layout; but will be consistent with retention described in the proposed action in the Decision Notice.

*14. The Project EA states that implementation of the proposed action could occur over five years (EA at 4.), but the Wildlife Effects report identifies a period of at least two years (Wildlife Effects report at 13.). This is a minor inconsistency, but for the effects analyses, the Forest needs to clarify how long they anticipate the proposed action will take. ([1-6])*

**Response:** The effects on wildlife would not change the determination for each species. This has been updated in the effects analysis.

15. *The Tribe appreciates that the Forest has project design features for the proposed actions. It would be helpful, however, if the final Environmental Assessment references the specific data or information that verifies their effectiveness. ([1-10])*

**Response:** The Nez Perce-Clearwater National Forests has excellent records of successful implementation of BMPs. Between 1990 and 2002, the Clearwater National Forest had a BMP implementation rate of 95 to 100 percent rate of effectiveness (USDA 2003, 2004, 2008, 2009; Snyder 2017). The same BMPs would be applied to the Stray Creek project and are expected to have similar results. The design features were developed from past projects, and professional experience, have been verified by field surveys and monitoring; and would be used to limit possible adverse effects to soils, water quality, fish and wildlife habitat, and culturally significant areas. Where design features are relevant in limiting possible adverse effects, it is included in the effects analysis. For example, the wildlife effects analysis documents the project effects to each analyzed species and determinations are supported by the effectiveness (habitat retained, etc.) of the design features; and the soils resource includes the effectiveness of the project design features in that it is grounded in monitoring and in some cases, research; and the specific data and/or papers are referenced within the soils effects analysis. All resource analysis with this information, if applicable is located in the Stray Creek EA and the project record.

16. *Implementation of design feature RP-2 assumes that the operator can identify the rare or sensitive plants growing in the Project area. Therefore, the Tribe strongly recommends that rare and sensitive plants are identified and mapped prior to any ground-disturbing activities. ([1-11])*

**Response:** FS staff will identify or be trained in the identification of botanical resources and will review/survey proposed treatment areas for rare plants prior to or during layout. Because timber sale contract provision provides the protection needed; the project design criteria related to rare plants has been removed.

17. *The Tribe recommends that the Forest minimize temporary road construction for this Project. Temporary roads increase ground disturbance and sediment delivery into streams. The Tribe requests that the Forest analyze the impacts of any proposed temporary road construction on terrestrial and aquatic ecosystem health. ([1-19])*

**Response:** The Forest has conducted monitoring on temporary roads where there were no stream crossings and found no evidence of sediment delivery to streams (USDA, unpublished data 2016). The Stray Creek Project would not construct temporary roads where stream crossings would be required. No measurable impacts on aquatic ecosystem health is expected. Effects of temporary roads have been analyzed and are documented in the EA and supporting documentation located in the project record.

18. *Given the documented benefits, the Tribe recommends full road recontouring as the preferred method of road closure. If funds are not available to fully recontour all roads slated for decommissioning, the Tribe suggests the following priorities in the order they are listed below.*
1. *Roads that show the highest sediment delivery to streams should be given the highest priority for full road recontouring.*
  2. *Roads in watersheds where Endangered Species Act ("ESA")-listed species are present should take priority over watersheds without ESA-listed species.*
  3. *Roads in Riparian Habitat Conservation Areas ("RHCAs") should have high priority for full road recontouring. Considering that roads often wind in and out of RHCAs, the Tribe recommends that the management prescription assigned to a portion of road should encompass the entire road.*
  4. *Roads with many stream crossings should rank higher for full road recontouring than roads with fewer stream crossings.*

5. Roads with a well-defined road prism should rank higher for recontouring than roads with minimal road compaction.
6. Roads where sensitive wildlife species will be negatively impacted should rank higher for recontouring than roads where sensitive species are not present. ([1-21])

**Response:** There are no existing system roads proposed for decommissioning. Temporary roads would be fully recontoured. Temporary roads would not contribute sediment to streams due to their lack of stream crossings. No temporary roads occur within RHCAs.

19. *There are two different measurements of best management practices: 1) whether contractors comply with them; and 2) the environmental impacts that best management practices still have on the environment. While the agency notes their implementation (#1), what is the analysis on (#2), which are impacts that best management practices cannot avoid? ([9-21])*

**Response:** There have not been any significant impacts associated with the analysis of this project, as document in the EA and FONSI. If the effectiveness of a particular BMP does not adequately address an effect, a project design feature would be implemented or activities associated with those effects would be avoided. The Clearwater National Forest has a BMP implementation rate of 97% or better since 1990 (USDA 2003, 2004, 2008, 2009; Snyder 2017).

20. *We would like the Forest Service to shift their methods for protecting resources from that of firm prescriptive restrictions to one that focuses on descriptive end-results; in other words, describe what you would like the end result to be rather than prescribing how to get there. There are a variety of operators that work in the Nez Perce-Clearwater market area with a variety of skills and equipment. Developing an EA and contract that firmly describes how any given unit shall be logged may inherently limit the abilities of certain operators. For example, restricting certain types of ground-based equipment rather than describing what condition the soils should be at the end of the contract period unnecessarily limits the ability of certain operators to complete a sale in an appropriate manner with the proper and cautious use of their equipment. To address this issue, we would like to see flexibility in the EA and contract to allow a variety of equipment to the sale areas. We feel that there are several ways to properly harvest any piece of ground, and certain restrictive language can limit some potential operators. Though some of the proposal area is planned for cable harvest, there are opportunities to use certain ground equipment such as fellerbunchers and processors in the units to make cable yarding more efficient. Allowing the use of processors and fellerbunchers throughout these units can greatly increase its economic viability, and in some cases decrease disturbance by decreasing the amount of cable corridors, reduce damage to the residual stand and provide a more even distribution of woody debris following harvest. Tethered-assist equipment is also becoming a more viable and available option for felling and yarding on steep slopes. This equipment has shown to contribute little additional ground disturbance when compared to traditional cable systems. Please prepare your NEPA analysis documents in a manner that will facilitate this type of equipment. ([6-14])*

**Response:** Focusing on end results is the direction the forest has been attempting to head whenever possible on current and future NEPA projects. During the analysis phase the proposed logging systems are primarily identified to provide resource specialists information to assist with their analysis. The actual logging systems identified during layout are based on specific on the ground knowledge. Due to limitations with our appraisal system and to ensure planned harvest work is in accordance with decision the logging systems for a particular sale need to be established. That said, a cutting unit within a sale maybe be described as “Tractor”, but that does not preclude a purchaser from using a different ground-based system such as shovel logging. Different logging systems are often agreed to with the purchaser so long as those system do not conflict with the resource conditions of the NEPA analysis and design

features and appropriate re-appraisal is completed as necessary. The forest is currently looking at the effects of “tethered logging” and it possible that type of harvesting could be used on current and future sales.

## Alternatives

*21. The Tribe is supportive of reductions in road densities for watershed health, the removal of older road templates from the landscape, and the elimination of corridors for the dispersal of non-native, invasive plant and insect species. The existing road density in the Middle Lolo subwatershed is 3.2 mi/mi<sup>2</sup>, which is greater than 3.0 mi/mi<sup>2</sup>—considered a “low” condition (EA at 10). While the four miles of temporary roads would be obliterated after use, these temporary roads would increase the already high road density during Project implementation. These four miles would also be ground disturbing by removing potential water conserving ash cap soil. There are also seven miles of roads in riparian areas within the 840-acre Project area. The Tribe recommends that the restoration treatment applied be decommissioning through full road recontour. ([1-20])*

**Response:** Forest Roads make up 53% of the total road miles in the Middle Lolo watershed with the remaining on private and state lands. While road densities are above desired conditions, past decommissioning has reduced their effects. A total of 18 miles of road have been decommissioned in the Yakus drainage with 4.7 miles occurring within the project area. The Forest recognizes the effects of RHCA roads and, of the 18 miles already decommissioned, 11.5 miles were within RHCAs. Temporary road miles do not count toward road densities due to their temporary nature. About 16 acres of land would be disturbed the temporary roads (4 acres/mile). This is about 0.3% of Forest managed lands in the Yakus drainage. Temporary roads would be obliterated and slash applied to the surface of the road (EA, p. 5).

*22. The Tribe supports road improvement, road decommissioning, installation of large wood in stream channels, planting native vegetation, restoration of degraded wetland and meadow habitat, and implementation of instream/streambank structures to restore riparian and aquatic ecosystem health. The Tribe requests that the Forest describe how the proposed Project will benefit the watershed and restore legacy resource damage that resulted in degraded riparian and meadow habitat, high road densities, and low large wood counts. ([1-22])*

**Response:** The project retains PACFISH RHCAs which would provide for future large wood input, streambank stability and shade over streams. BMPs would be applied to roads used for log haul including dust abatement and gravel surfacing on the primary haul routes. No road decommissioning or instream work is proposed with the project. Past restoration activities in the Yakus Creek drainage include 6 miles of road decommissioning outside of RHCAs and 11.5 miles within RHCAs. This equates to a 40% reduction in roads since 2000. Three culverts were also replaced to provide for aquatic organism passage and road improvement was recently conducted on Roads 514 and 519.

## Regulatory Framework

*23. DEQ assumes the design of proposed management activities would use INFISH guidelines to minimize impacts for temperature. Assuming all federal, state, and local permits have been obtained, regulations met, and reviews completed. ([3-1])*

**Response:** The project retains PACFISH RHCAs that will provide shade over streams, and no impacts to stream temperature are expected. The project complies with all applicable regulatory framework as documented in the EA, decision notice, and project record. Required permits will be obtained post-decision.

24. *The incomplete project file does not include important information on several topics, including specialist reports for soils, hydrology, fisheries, soils and landslide risk. Without information on these topics it is very difficult for the reviewer to make meaningful comments on the proposal. ([7-2])*

**Response:** The purpose of an environmental assessment is to briefly provide sufficient evidence and analysis, including the environmental impacts of the proposed action, to determine whether to prepare either an EIS or a finding of no significant impact (FONSI) per 40 CFR 1508.9.

25. *We expect this project to fully comply with the forest plan, and for the actual environmental assessment released after this comment period to demonstrate that compliance in a way the public can understand. ([9-4])*

**Response:** The EA documents compliance with the Forest Plan (p. 31-32).

26. *In addition to the cumulative effects from the past project areas, we noticed that the Central Zone CE replacement culverts for the Lolo Creek Drainage, which was scoped privately to only FOC and the Tribe, proposed culvert replacements along what we learn now (according to the scoping document) will be haul routes for this project. ([9-47])*

27. *Because one of the reasons for these culverts was "timber haul," and this project is that timber haul, the sedimentation from those culverts must be part of the impacts for this project and should be counted with the sediment generated in this project. It is unlawful to break up those impacts into smaller projects. ([9-48])*

**Response:** The 24 culverts proposed for replacement were identified as a result of a collaborative aquatic restoration effort known as Atlas which occurred after the Lolo Insect & Disease Project was signed. All 24 pipes occur on roads needed for future management and are barriers to the upstream migration of aquatic organisms. Twenty-one of the 24 Atlas-proposed replacements have been deferred. Three, all of which occur under paved Forest Road 100 and are not within the Stray Creek analysis area, will be replaced as authorized by the Lolo Stream Crossing Replacement Project Decision Memo. These were retained so that they could be replaced prior to the upcoming Road 100 repaving project. This alleviates the need to repave the road over the culverts twice resulting in reduced replacement contract costs.

28. *There is minimally scientific controversy with the science the agency is using to justify the need for this project. Thus, the agency must prepare an EIS. ([9-14])*

**Response:** On the contrary, silvicultural treatments in stands with root disease are well founded and based on decades of scientific literature cited in the vegetation analysis (document 11-013) and supported by the Clearwater Forest Plan.

29. *In the Orogrande Community Protection Project, the Forest Service found a wagon wheel where it was punching in a temporary road, and the contractor moved the resource before archeologists could visit the site and assess historical significance. This was not identified in the EA. This illustrates the problem with implementation before on-the-ground visits for analysis. By project implementation, the Forest Service cannot always halt activities to do an analysis. And, NEPA requires the agency to take a hard look before project implementation. ([9-14])*

**Response:** Project design feature CR-1 halts ground disturbing activities for a scenario such as this. This is also a mandatory contract provision and complies with 36 CFR 800.

30. *The project is within the recently approved Lolo Insect and Disease project area and should have*



*been analyzed with that proposal. The Lolo Insect project already includes a considerable amount of timber harvest in the Lolo Creek drainage and this project will only serve to accelerate cumulative impacts. ([7-3])*

**Response:** Cumulative effects were analyzed and are included in the environmental assessment and supporting analysis information that was incorporated into the environmental assessment by reference. The need for the Stray Creek project did not arise until 2018 and project development of a proposed action began late summer of 2019; with scoping of a proposed action occurring in October/November of 2019.

*31. Approved best management practices that may apply to this project include "Rules Pertaining to the Idaho Forest Practices Act" (IDAPA 20.02.01) and "Stream Channel Alteration Rules" (IDAPA 37.03.07). Specialized best management practices may be required to address water quality protection objectives not addressed by the above listed approved best management practices. The DEQ also recognizes USFS INFISH standards that demonstrate a knowledgeable and reasonable effort to minimize resulting adverse water quality impacts to be in accordance with state water quality standards. ([3-3])*

**Response:** The Idaho Forest Practices Act and Stream Channel Alteration Rules are relevant and will be applied to the Stray Creek project. Additionally, PACFISH standards will be applied.

### **Models/Monitoring**

*32. If the Forest Service is using models to support conclusions, we would like the Forest Service to disclose those models and introduce evidence as to how the Forest Service has validated those models. ([9-5])*

**Response:** All models used have been disclosed in the analysis within the EA and/or supporting resource effect analysis documentation located in the project record. Additionally, information on the validation of WEPP and ECA is located in Appendix D of the Lolo Insect & Disease FEIS (pp. 398, 400) and has been incorporated by reference.

*33. What forest-plan monitoring have you done in the area? The Forest Service for the Nez Perce and Clearwater National Forests stopped posting these reports online after the 2009 annual report. You have not been complying with forest-plan monitoring, which casts doubt on what the agency proclaims to be effective as well as not providing an accurate environmental baseline. ([9-7])*

**Response:** While Forest Plan monitoring is outside the scope of the proposed project activities, the Forest has produced reports dating from back to 1988. These can be found on the online at [https://www.fs.usda.gov/detail/nezperceclearwater/landmanagement/planning/?cid=fsm91\\_055807](https://www.fs.usda.gov/detail/nezperceclearwater/landmanagement/planning/?cid=fsm91_055807). The EA includes a brief description of the existing condition that serves as the baseline to compare effects of the proposed action; additional documentation located in the project record also contains existing condition information that was gathered to develop the Stray Creek project. Any effects from previous projects have been accounted for in baseline conditions. Additionally, more recent reports from IDFG have been referred to for status of species and/or their potential habitat in the project area.

*34. What monitoring has occurred in this watershed commensurate with the Clearwater Forest Plan Settlement Agreement? ([9-46])*

**Response:** There are no Forest Plan monitoring sites within the Yakus Creek drainage.

## Cumulative Effects

35. *The EA lacks sufficient summaries of direct, indirect, and cumulative impacts to resources, including but not limited to, botany, invasive species, range, wildlife, soils, roads, and aquatics. The lack of information impedes a full understanding of the Project's proposed actions and impacts. ([1-23])*
36. *The EA states that "[t]his section [Environmental Impacts] describes the existing condition of the project area and discloses the anticipated direct, indirect, and cumulative impacts of the proposed action." (EA at 7) The Tribe disagrees with this statement. ([1-24])*

**Response:** The purpose of an environmental assessment is to briefly provide sufficient evidence and analysis, including the environmental impacts of the proposed action, to determine whether to prepare either an EIS or a finding of no significant impact (FONSI) per 40 CFR 1508.9. Environmental impacts (direct, indirect, and cumulative impacts) of the proposed action and what would happen if no action was taken is included in the EA with supporting information located in the project record.

37. *An individual action may have significant effects when considered in conjunction with the effects of other actions, even when its effects would be insignificant if considered alone. The Forest needs to consider past, present, and reasonable, foreseeable future actions for assessing cumulative impacts on aquatic and terrestrial resources within and in proximity to the proposed action. These actions should include:*
- a) harvest and impacts from Lolo Insect and Disease project area north and east of the Stray Creek project;*
  - b) the existing road system;*
  - c) Lochsa Thin project;*
  - d) Yakus Creek project;*
  - e) Pete King Wildlife Restoration;*
  - f) road decommissioning;*
  - g) firewood cutting;*
  - h) fire suppression;*
  - i) livestock grazing;*
  - j) suction dredging on Lolo Creek;*
  - k) 2015 Woodrat Fire; and*
  - l) salvage and timber harvest on state, private, and federal lands. ([1-25])*
38. *This project is proposed over the same areas as the Lochsa Thin project, the Yakus Creek project, the Lolo 1st 50, and the Lolo Insects and Disease project, and near other completed projects, such as the Brick Trout timber sale. What projects are completed, and what are the results for monitoring these projects had planned? Has the Lolo Insects and Disease project implementation begun? The cumulative effects of a third project over the same area within 15 years of each other must be analyzed, especially since at least one project has not yet begun. The cumulative effects need to properly consider over 40- acre openings the Forest Service has made and will make (with approved projects that haven't yet started). ([9-6])*
39. *What are the cumulative effects of past projects, of projects that have been approved but not yet implemented, impacts of neighboring private and state lands? ([9-57])*

**Response:** Cumulative effects, if any, were assessed for all resources. Cumulative effects may exist if direct and/or indirect effects from the Stray Creek project occur within the same spatial and temporal area of effects from other projects or actions. The EA discloses whether or not there are cumulative impacts anticipated; resource effects analysis documentation located in the project record has been incorporated by reference into the EA that also provides supporting cumulative effect analysis information. Whether or the actions listed above were considered for cumulative effects depends on the spatial and temporal area

the resource specialist determined was appropriate for analyzing cumulative impacts.

For example, the projects mentioned above were not considered in cumulative effects for aquatic resources based on local monitoring of timber harvest and temporary roads (USDA, unpublished data, 2016). Recent science related to the effectiveness of BMPs, especially those related to road use, were also considered (EA p. 25, 27-28). The application of BMPs is expected to result in no measurable direct or indirect effect on sediment or other water quality parameters, and therefore no measurable effect to fish or their habitat. Only those activities that could affect water quality or fish habitat would be considered for cumulative effects. Since the Yakus project is not expected to have measurable effects on water quality or fish habitat, no cumulative effect would be expected.

In general, habitat conditions related to sediment are improving on Forest managed lands in the Lolo Creek drainage, even with continued management. Reductions in cobble embeddedness from 2017 to 2019 were observed in Eldorado Creek (22% down to 17%), Musselshell Creek (38% down to 23%), Lolo Creek just above Eldorado (24% down to 11%), and Lolo Creek just above Yoosa Creek (51% down to 30%) (documents 20-022 through 20-029). Desired conditions for cobble embeddedness are less than 25% (Espinosa 1992). High spring flows in 2017 and again in 2019 were primarily responsible for flushing sediment, which has likely been stored in the watershed for decades, out of the system.

## **Fire/Fuels**

*40. Various assumptions that the Forest Service is making about fire drivers and fire ecology are not supported by the best available science. Because the scientific controversy is so fundamental and everything the Forest Service proposed is based on this controversy, an EIS must be prepared for this project. ([9-41])*

**Response:** The Stray Creek project is not driven by fire/fuels. Fire/fuels does benefit from the proposed activities. Once activity slash is treated, fuel models are modified by creating a light load of coarse fuels that support only low flame lengths (Graham et al. 1999).

*41. The basis with which the agency is approaching fuels does not have a scientific foundation. High intensity fires are a historical fact in this area. Hanson (2010) p. 14. Climate is driving more severe fire weather. The study that the agency cites (Moghaddas and Craggs 2007) recognizes that "Not all fuel treatments will modify fire behaviour all the time in all vegetation types or weather conditions." What is the agency's evidence that the proposals will do so here? Has the agency monitored any of the previous projects where this was used as a rationale? ([9-42])*

**Response:** During the 2015 Woodrat Fire (on the Clearwater National Forest), fire crews utilized mechanical treatment areas (Interface Fuels 2 project) to successfully stop the spread of fire to the community of Syringa. The conditions within these treated areas prevented the fire from being high intensity/severity, which allowed firefighters to work directly along the fire edge and stop fire spread. Once activity slash is treated, the treated area would represent a fuel model that supports a light load of coarse fuels that would have low flame lengths if a fire were to occur.

*42. Recent science has debunked the myth that no management corresponds to higher fire severity. Bradley et al (2016). According to Bradley et al., not only did areas that did not have vegetation management— such as roadless areas or areas of older growth—did not show an increase in fire severity, but the researchers found the opposite to be true: "[B]urn severity tended to be higher in areas with lower levels of protection status (more intense management), after accounting for topographic and climatic conditions in all three model runs." Bradley et al. (2016). Naturally occurring high-intensity fire is the exception, and not the rule. Hanson (2010) pp. 12. This needs to be examined and discussed with the best available science in an EIS. ([9-43])*

**Response:** Comment is outside the scope of project. The proposed Stray Creek Project lies entirely within Management Area E1 of the Clearwater Forest Plan which requires fire management to suppress fires. During the 2015 Woodrat Fire (on the Clearwater National Forest), fire crews utilized mechanical treatment areas (Interface Fuels 2 project) to successfully stop the spread of fire to the community of Syringa. The conditions within these treated areas prevented the fire from maintaining a crown fire, which allowed firefighters to work directly along the fire edge and stop fire spread.

## Forest Vegetation

43. *The EA and Vegetation report do not, however, describe the degree or extent of insect and disease infestations to justify the proposed scale and intensity of harvest. ([1-1])*

**Response:** Individual unit treatment boundaries would be assessed and laid out prior to harvest. The forest vegetation effects documentation and EA have been updated to better describe the extent of the disease issue throughout the proposed treatment area. To summarize the updated information, approximately 80% of the proposed treatment area is infected with moderate to severe root disease to the extent that tree growth and existing and future stand development is affected.

44. *The Project EA proposes primarily regeneration harvest on 425 acres to improve forest health and restore early seral tree species, however the Vegetation report details that the amount of canopy cover by species and extent of root disease in stands would determine the type of treatment (e.g. regeneration or intermediate harvest or a leave patch). (Vegetation report at 4-5.) Were past intermediate harvests successful at achieving desired conditions? Is intermediate harvest a viable option for meeting the purpose and need? ([1-3])*

**Response:** The forest vegetation effects documentation discusses species composition, not canopy cover, as one component for determining treatment. Treatment type would be based on individual area needs. Previous intermediate treatments were primarily Sanitation and Salvage, and Improvement cuts completed during the 1970s and 1980s. It is assumed, based on stand records, that the treatments did meet desired conditions at the time of implementation. For the Stray Creek Project, intermediate harvest may be considered only if the conditions described in the selected alternative are met. The likelihood of intermediate treatments being implemented within the proposed treatment area is about 20% based on field walk through data evaluating approximately 80% of the area being moderate/severe disease infection.

45. *The Tribe encourages the Forest to consider planting climate-adapted seed sources of early seral species (e.g., <https://seedlotselectiontool.org/sst/>) where appropriate. ([1-5])*

**Response:** All seed used in projects comes from seed sources that are either improved seed from Forest Service seed banks or collected from within genetically mapped seed zones.

46. *We recommend that the Forest Service consider a modified regeneration harvest prescription known as "aggregate retention". The purpose of aggregate retention is to maintain the biological legacies of the stand structure, mitigate the visual impact of the harvest, and maintain structural components that are important to wildlife. While aggregate retention has been applied most frequently to stands on the moist slopes of the western Cascades, this prescription has been successfully applied to moist sites in the Inland Northwest (e. g. Bottom Canyon and Beaver Creek Projects on the Coeur d'Alene Ranger District). Indeed, the species composition of forest stands on the west slope of the Cascades are somewhat different than the forest stands of our area, but the same basic foundation for regeneration harvest prescriptions remains the same—that is conversion of the stand from one suite of species to another. Based on pilot projects implemented on the west slope of the Cascades, Johnson and Franklin*

*(2009) advocate for fully retained portions ("aggregates") of the original stand. Specifically, they recommend retaining approximately 30% of the original stand in aggregates, varying in size from 0.5 to 5 acres. Larger aggregates are encouraged where unit size and yarding methods permit.*

*Aggregates should be centered on mature or old growth trees, concentrations of coarse woody debris, snags, seeps, rock outcroppings, or other unique structural and/or habitat features. In particular, aggregates should be located where stands with old growth attributes exist as described by Green et al. (2011), but which may otherwise be of insufficient size to be allocated according to Land Management Plan old growth requirements. To the extent practical, aggregates should include an overall representation of the tree species that were present in the original stand.*

*Riparian habitat conservation areas (RHCAs) that extend into harvest units may contribute up to one-third of the 30% aggregate retention target. However, credit for riparian buffers must be minimized because RHCAs are spatially concentrated in portions of harvest units, rather than well distributed throughout them. Similarly, retained areas protruding into harvested areas should be minimized because creation of large areas lacking in retention would fail to meet the objectives associated with aggregate retention harvest prescriptions.*

*In the treated areas between the aggregates, additional retention should occur as individual leave trees, coarse woody debris, snags, and small clusters of trees. Again, all large trees residing in the interstitial spaces should be retained. Retention of individual trees is intended to provide candidates for snag and coarse woody debris recruitment and nesting habitat. Following harvest, treated areas should be broadcast burned, and aggregate should remain unburned.*

*Finally, the edges of these units should be treated in a manner that more closely mimics a natural opening. Unit edges should be variably thinned, creating a gradual transition from an open canopy to a closed or nearly closed canopy in the adjacent stand. This technique is often referred to as "feathering" by the layman and is intended to reduce the "edge effect" created by regeneration harvest. "Feathering" results in a more visually appealing opening and lessens the impact on wildlife. ([4-1])*

**Response:** The project is meeting Forest Plan standards and guides for visuals and would be implementing valid and appropriate silvicultural treatments.

The Stray Creek Project is designed to treat the area based on stand condition, in this case specifically focused on stand health. Where areas are highly infected with root disease and butt rots, infected and susceptible tree species would be removed while the early seral species would be retained. Where there is little or no evidence of root disease or butt rots, trees would be treated with intermediate methods (i.e. thinned) leaving fully stocked stands. By focusing our treatment design on reducing less desirable stand conditions, disease infection and susceptibility, the resulting appearance will be varied across the landscape. In addition, there would be corridors of untreated RHCA and areas that are unable to be treated due to wet conditions or harvest system limitations, further adding to post-treatment visual variability. This varied appearance seems to be what this comment is advocating for and the project would provide via the natural variation currently on the landscape.

*47. Retention of large or old leave trees as ecological legacies has conventionally been implemented through the use of diameter limits. However, retention of trees at or beyond a specific age threshold is gaining traction in the scientific literature (e.g. Johnson and Franklin 2009). While no single age or diameter can define these biological legacies, age thresholds and diameter limits can help facilitate the conservation of the most desirable leave trees.*

*We suggest retention of all trees (regardless of species) that are 150 years of age or more. This is the age threshold used to define old growth trees in the Northern Idaho Zone (Green et al., 2011). Lodgepole pine is a notable exception (120 years).*

*We do not envision that the age threshold would require the Forest Service to bore every tree. Instead, Johnson and Franklin (2009) offer a method for implementing the age threshold (see pages 26 and 27). Stand exam data collected for timber sale planning can also reveal the average diameter of 150-year old trees by species, stand, or site, which may then be applied to the project. ([4-2])*

48. *If the application of an age threshold is problematic, then we would suggest the use of stratified diameter limits for the retention of large trees. We suggest using the diameters for minimum old growth criteria in Green et al (2011) for the Northern Idaho Zone:*

- *Retain all ponderosa pine, Douglas-fir, grand fir, western hemlock, white pine, and western larch that are 21 inches dbh or greater.*
- *Retain all western red cedar that are 25 inches dbh or greater.*
- *Retain all lodgepole pine that are 13 inches dbh or greater.*
- *Retain all subalpine fir, Engelmann spruce and mountain hemlock that are 17 inches dbh or greater.*

*An age threshold or stratified diameter limit should be applied to all silvicultural prescriptions in order to preserve these biological legacies. Trees that otherwise meet age threshold or diameter limit guidelines but show signs of the onset of mortality should still be retained for the purposes of snag recruitment and wildlife benefit. Such trees should only be cut if they pose a risk to logging operators. We support leaving felled hazard trees on site to provide coarse woody debris, which also benefits numerous species of biota and creates favorable microclimates for the regeneration of desired trees and vegetation. ([4-3])*

**Response:** The project is currently meeting Forest Plan standards for retaining old growth. The Clearwater Forest Plan Appendix H outlines requirements for consideration of old growth. In addition to Forest Plan requirements, old growth was analyzed using Green et al. (2011). See forest vegetation effects documentation for a summary of old growth within the project area.

49. *Where dead trees or snags exist, they should be retained for wildlife benefit. In this instance, age thresholds and diameter limits should not be applied. While several sources (Thomas 1979, Raphael and White 1984, Zarnowitz and Manuwal 1985, Morrison and Raphael 1993) provide recommendations for the amount of snags to retain in unburned forests, why not retain all snags unless they pose a safety risk? Dead trees tend to provide little or no economic value, but they are of great benefit to wildlife. ([4-4])*

50. *Science suggests that there are far too few large dead trees to maintain ecologically healthy forests. Hanson (2010) pp. 19-20 (citing Rocca and Romme 2009, Romme et al. 1986). Wildfire, insects, and disease will create the dead trees, so allowing these disturbance events, whether they happen in a short, intense time frame or a longer time frame, to continue is going to be the best route for ecologically healthy forests. Fire, insects, and disease are all natural processes and tree death is natural—it is how forests renew themselves. ([9-13])*

**Response:** Snags are generally left on the landscape to meet Forest Plan standards and guides for soils and wildlife. The proposed project is in compliance with those standards and guides.

51. *The retention of on-site, coarse woody debris is important for a variety of reasons. There are a number of species that benefit from logs, trees, boles, and other large pieces of wood lying on the ground. Coarse wood debris also reduces erosion by trapping sediment and run-off and helps maintain soil nutrient capital. The microclimates created by coarse woody debris are often critical to the regeneration of desired trees and vegetation because removal of over story trees during logging operations increases solar radiation and reduces soil moisture. We recommend retention of the following amounts of on-site coarse woody debris: (refer to table in letter). ([4-5])*

**Response:** The proposed action includes a design feature whereby 17-33 tons per acre of coarse woody debris larger than 3 inches in diameter will be retained on-site based on Regional Guidance and direction from the soil specialist.

52. *Of the 840 acres in the Project, regeneration harvest is proposed on approximately 425 acres (51%) to improve forest health and restore early seral species. The table below illustrates the need for the regen with shade tolerant species occupying so much of the Project area. (see table 2 in letter)*

*The table points out that a total of 87% of the project area is in either a grand fir or shade tolerant mix—both of which is very susceptible to root rot problems.*

*Couple this information with the tree size in the table below, and it appears the Forest is taking every opportunity to enter into stands that are currently merchantable to do the needed silvicultural treatments. (see table 3 in letter)*

*Roughly 88% of the stands are in a merchantable diameter size that would lend it for harvest, however due to past entries (62%) and existing stand conditions—treating 51% of the landscape seems like a practical approach to this landscape. AFRC further supports the reestablishment of ponderosa pine, western larch and white pine on the acres that have regeneration harvests planned. ([6-3])*

53. *AFRC supports creating openings larger than 40 acres and supports attaining approval by the Regional Forester (FSM 2471.1) should those openings be needed to move toward naturally occurring opening size and patterns. ([6-4])*

**Response:** Thank you for your comments.

54. *It has been well documented that thinning in riparian areas accelerates the stand's trajectory to produce large conifer trees and has minimal effect on stream temperature with adequate buffers. Removal of suppressed trees has an insignificant short-term effect on down wood, and ultimately a positive effect on long-term creation of large down woody debris and large in stream wood, which is what provides the real benefit to wildlife and stream health. We encourage the Forest Service to focus their riparian reserve treatments on a variety of native habitats. The ACS describes the need for treatments that meet the need of multiple habitat types and we encourage the Lochsa/Powell District to look for ways to incorporate treatments that meet those needs. Utilization of gap cuts to promote early seral habitat in the reserves, treatments to diversify all areas of the reserve, and prescriptions that account for the full range of objectives that the ACS mandates should be considered.*

*The tradeoffs that the Forest Service will likely be considering through the ensuing environmental analysis will be between achieving these forest health benefits and potentially having adverse impacts to streams. These impacts to streams typically include stream temperature, wood recruitment, and sedimentation associated with active management. We would like the Forest Service to review the literature cited below and incorporate its findings into your environmental analysis that will shape the level of management permitted to occur in riparian reserves. ([6-6])*

**Response:** There will be no harvest in riparian areas, the project will be adhering to PACFISH.

55. *the presence of tolerant Douglas fir, grand fir and western red cedar are the norm for most of the project area and not the "high risk" situation described by the Forest Service in the preliminary Environmental Assessment. Based on the information from Cooper et al. (1991) Forest Service ideas that the project area needs to be converted to more intolerant species such as white pine, ponderosa pine and western larch is just plain wrong. ([7-14])*

**Response:** When referencing risk in relation to this project the discussion is centered on current infection

and susceptibility of existing species to root disease. The proposed treatment area is primarily composed of Douglas-fir, grand fir, and western redcedar all of which are susceptible to root disease and butt rot. When susceptible species are allowed to persist on an infected site, site productivity can drop to the point that the stand will no longer support forested vegetation (Hagle, 2004). Planting western larch and rust-resistant western white pine also adds or augments species components that are both major and minor early seral. By fostering a mixed conifer stand that includes western larch, western white pine, and potentially ponderosa pine and spruce a more resilient stand is the result.

56. *Except for past harvest operations and the introduction of blister rust, this system pretty much operates as it did historically. Overtime, white pine may make a comeback as foresters develop and plant rust resistant stock and the tree develops resistant mechanisms on its own. I agree that the retention of disease-free white pine should be included in harvest prescriptions and planting of disease resistant stock practiced. However, a strategy that emphasizes white pine as the primary component of most stands (as you propose here) is highly questionable given the current status of white pine blister rust. White pine is subject to an introduced pathogen that has resulted in catastrophic losses across the species range and we don't know how that pathogen might respond to climate change. ([7-15])*

**Response:** Historically, western white pine was a major species component across the landscape, and grand fir was a minor component. With the loss of western white pine across the forest, grand fir became more prominent, as did root disease. This project proposes planting a mix of western larch, western white pine and possibly spruce or ponderosa pine, as appropriate based on habitat types.

57. *Claims about stocking density in existing stands also appear to be overstated. The fact that these systems always had high densities of trees is well documented by Haig (1932) in his description of the white pine type years ago and long before the effects of fire suppression was considered a major issue. He reported that "The extremely rapid decrease in number of trees with increasing age is strikingly apparent. On good sites (site index 60) the total number of trees per acre drops from 4,700 at 20 years to 720 at 80 years, and to 390 at 120 years. The number of trees also decreases rapidly with increase in site index." On excellent sites (Site index 70) Haig found an average of 2,800 trees per acre over a diameter of 0.6 inches in diameter at 20 years of age, on fair sites (site index 50) Haig's tables show approximately 7,800 trees per acre over a diameter of 0.6 inches DBH at age 20 and on poor sites (Site Index 40) he found an 11,500 trees per acre at age 20. ([7-16])*
58. *Clearly, the idea of understory encroachment is not an applicable in the moist cedar habitat types that predominate in the project area. Tree species found here like cedar, grand fir and white pine have made very little genetic investment in mechanisms to survive fire. Instead they rely on fast growth and extensive canopies that allow for light capture in densely stocked stands. ([7-17])*
59. *What is the forest like in this area, and are there old-growth-dependent species found here? Please disclose if the proposed cutting units will, in the foreseeable future, qualify as old growth or whether they do now. From Google Timelapse, it looks as if at least one section of the previously unlogged areas existed in 1984 and has not been disturbed since then, which, by the Forest Service's calculation, would make the area at least potential old growth or potential future old growth. ([9-29])*

**Response:** Neither the EA or the vegetation analysis reference stand density as a factor leading to the purpose and need of the project. The proposed cutting units will not qualify as old growth in the foreseeable future due to the decline in stand health, primarily from one or more aggressive root diseases. Old growth-dependent species are located in the project area and effects to habitat were analyzed (EA p. 10-15, 31; document 11-002, 11-013).



60. *No real evidence is presented that backs up the conclusion that the area is at high risk from root disease and that stand integrity is a risk. Goals of the proposed project appear to be fostered largely by the idea of increasing the level of timber harvest across the Forest. There appears to be no recognition of the importance of dead and dying trees and older stands to fish and wildlife populations and the historical conditions under which these stands and the species that utilize them evolved. ([7-18])*

**Response:** Current stand conditions include groups of windthrown trees, conks of known root diseases and pockets of dead and dying trees (EA pp. 10-14). On-site conditions were verified through field visits. Root disease is a condition of the site and once established can persist on the site for long periods, impacting site productivity just as much as soil or climate (Clearwater Forest Plan, Appendix 0, 1987). Best management practices include harvesting the infected stand and reforesting with root-disease-resistant species such as western larch, western white pine and ponderosa pine (Hagle 2004). Project design criteria would retain habitat or adjust timing of activities to minimize impacts on wildlife. In particular, trees with large cavities or stick nests would be left, and some snags would be left for wildlife cavity dwellers. If these conditions exist with RHCA that remain unharvested, downed wood with the RHCA or stream channel provide habitat for those species that require these habitat attributes.

61. *I cannot understand Forest Service prejudice against grand fir and Douglas fir, particularly since most of the project area is composed of cedar and grand fir habitat types. Why do you propose to convert stands with a high component grand fir, western red cedar or Douglas fir to white pine, larch and ponderosa pine? Two of these species were likely limited of limited distribution in the project area (Ponderosa pine and larch) and the third species (white pine) which I agree would have been more common is subject to an introduced pathogen that has decimated the species?*

*Such wholesale conversions are very risky and make no sense from an ecological perspective. There is a good reason why 91% of project area (Table 2 - EA page 8) is currently composed of grand fir and western red cedar cover types. Both of these species find prime habitat in the project area and historically they always made up a significant component of the mixed species stands that are common here. Contrary to your assertions in the EA, their presence does not indicate catastrophic risk for increasing levels of insect and disease attack. Such stands have survived thousands of years without human intervention and it can be expected that stands will naturally move to having higher components of western red cedar. In fact, western red cedar is one of the longest lived and most resilient species found on the Nez Perce/Clearwater National Forests. Western red cedar has few problems with insects and disease and historically old growth cedar stands where the hallmark of stable stands that lasted for hundreds of years on the Nez Perce-Clearwater.*

*In habitats like we see in the project area, most of the competing trees would have been present at the time of stand establishment and stands would have changed overtime due to competition, blowdown, and insect and disease attacks. These are factors that the EA appears to consider major problems in the project area, when in fact they are part of normal stand development. Understory fire would have also had some influence, but it is not a major driver like it is in ponderosa pine habitat types. ([7-19])*

**Response:** The Forest has not identified any tree species as good or bad. The project does aim to address the existing condition within the proposed treatment area. The reduction in western white pine from blister rust allowed grand fir and Douglas-fir to proliferate. An introduced non-native pathogen (*Cronartium ribicola*) constitutes human intervention that changed the trajectory of these stands. The existing condition is that approximately 80% of the proposed treatment area is moderately-to-severely infected with root disease and butt rots, both are the cause of mortality and volume/value degradation. The management area for the project is designated as timber production ground so the volume/value

degradation leads to the purpose and need of the project to contribute to local economy. Root diseases are diseases of the site, meaning they will persist on site for longer than there are live susceptible tree species by living on the residual root system. Site persistence reduces establishment and survivability of naturally seeded seedlings leading to a reduction in forested acres (Hagle 2016). Planting tree species that are less susceptible to root disease and are site appropriate would allow trees to establish on the site and reduce opportunities for the disease to spread.

62. *What are the assurances this area can be restocked with the tree species with which the agency wants to restock it? ([9-10])*

**Response:** Past harvest reforestation data from other projects in the area show successful regeneration with the tree species proposed for reforestation within this project area. Stocking exams for the nearby Yakus Timber Sale are available in the project record.

63. *And, while western white pine might be less susceptible to root disease, it is susceptible to blister rust and impacted by a warming climate, which the agency should consider. ([9-11])*

**Response:** The Forest understands the risk of rust infection and climate change to planted seedlings. All western white pine planted in harvest units comes from improved, rust-resistant stock. Another technique utilized, based on rust and climate considerations, is to plant seedlings at higher densities to account for anticipated mortality. Seed transfer zones have also been expanded to reflect anticipated impacts of a changing climate.

64. *Given that fire, insects, and disease are natural components to forest ecosystem cycles, the proclaimed need to eliminate root rot as a purpose was unsupported in the scoping document and did not cite any science. What role does root rot play in forest ecosystems? Specifically, what are their benefits? Is it desirable to eliminate root rot entirely? Why? Is it desirable to eliminate root rot and replace with trees that are not susceptible to that disease but is susceptible to others? Why? ([9-15])*

**Response:** Eliminating root disease is not a component of this project and is unfeasible; root disease is a persistent disease of the site and will remain on site for more than one generation of trees. If susceptible trees continue to remain on-site in an area that has one or more aggressive root diseases, then the stand will eventually be converted to non-forested vegetation unless the area can be altered to include species that are not as susceptible to the root disease (Hagle et al. 2000). The disease will still be present in the stand, but the overall mortality from the disease will be lower.

65. *When the agency discusses past regeneration harvest from landscape disturbance patterns, it states, "By this time, trees retained in all regeneration harvest types were left in order to lessen the visual effects of harvest and to provide habitat (snags and downed wood) for some wildlife species. These trees also help provide for long term soil productivity and soil stability. Both standing and downed woody material is being retained in all regeneration harvest units as directed by Forest Service Regional guidance." How is that possible when regeneration cuts aim at reducing "fuels"? ([9-24])*

**Response:** The down woody material is usually 3 inches and greater, that could also be considered 1,000 hour fuels; project design criteria requires 17-33 tons of down woody material to be retained per acre for soil. This amount of 1,000-hour fuels do not carry fire and create hazardous fuels. The 10 and 100-hour fuels are what would carry the fire and are removed with regeneration harvest. Fuel reduction is not a need for the Stray Creek project and the purpose of regeneration harvest to accomplish the need for the Stray Creek project is to regenerate stands affected by root disease with early seral species that are more

tolerant to disease (see Appendix O of the Clearwater Forest Plan).

66. *Tree death is an ecological process. What are the benefits to allowing the ecological processes to kill weaker trees as opposed to a timber project that will healthy and genetically diverse trees across the board? ([9-55])*

**Response:** Current conditions suggest that if left alone, the stand will continue to decline in health and number of trees. The benefit of treating the area is to develop a more diverse species composition that will be resistant, resilient, and increasingly capable of perpetuating itself through time.

## Old Growth

67. *We are prejudiced from commenting in depth on old growth because of the paucity of information provided, none of which is analysis and are simply conclusions. ([9-26])*

68. *Field verification of old growth stands will occur for all timber harvest and new road construction projects. The scoping document does not indicate this has been done. ([9-27])*

**Response:** The Stray Creek project is currently in compliance with Clearwater National Forest Plan standards for old growth found in Appendix H growth (EA p. 31)..

69. *There is not much disclosed about the old growth in this project area. From the Lolo Insects and Disease past harvest map, it appears as if the agency is planning timber harvest for areas that have not had a record of previous timber harvest. Demonstrate that the agency is complying with the forest plan and settlement agreement with maps and analysis showing where old growth is in addition to where the proposed logging units are located, and demonstrate that someone has visited these areas on the ground. Demonstrate the agency is meeting its snag guidelines. ([9-28])*

**Response:** No stands being managed for old growth are being proposed for harvest. The project contains one old growth analysis unit that contains more than the minimum 5% old growth required by the Forest Plan (document 11-013)

70. *Why is the silviculture expert analyzing old growth when the reason for old growth is to maintain wildlife that depends on old growth? Because of the reasons for maintaining old growth (wildlife), should the wildlife biologist be analyzing this issue? Are there old-growth-dependent species in the area? ([9-30])*

**Response:** Trees are a vegetation resource and are analyzed under the vegetation analysis. There are several reasons to analyze and maintain old growth stands. One reason is to maintain wildlife habitat through active management with sound Silvicultural methods. Another reason is to maintain large trees across the landscape and provide structural diversity for other resources. The wildlife effects analysis includes effects to species that are old growth dependent and/or require mature habitat.

71. *Is there old growth or step-down old growth in the project area? When is the last time it was counted and what projects have occurred in this watershed and forest-wide since that time? The PA does not disclose which Old Growth Analysis Unit this falls into. Has the Forest Service validated or ranked old growth? Please map this out. Some of the pictures you provided contain old-growth characteristics, such as an understory and overstory that looks to exceed 70 percent, stand decadence, and downed logs. Has a wildlife biologist visited these areas to evaluate them as potential old growth? Is the Forest Service logging step-down old growth? Are you considering thinned areas of old growth to be old growth, in contravention of characteristics outlined in the forest plan? The Forest Service's statement that species susceptible to root disease "prevent stands from obtaining old growth structure because of continuing mortality" is*

*inaccurate because old growth is the decadence that results from intact stands impacted by fire, insects, and disease. What does eliminate old growth, however, is logging—thinning as well as regeneration logging. Logging will remove old growth characteristics. ([9-31])*

**Response:** Stands within the treatment unit do not meet old growth age requirements, nor do they meet minimum diameter requirements. Currently, there are over 1,500 acres of step-down being managed in OGU 107, or around 18% of the total acres within the OGU (document 11-013). While decadence is a part of old growth characteristics, it is not a desired component in a young stand, nor is it desirable when it is spread throughout the stand. If present in high enough numbers, root disease can successfully prevent the reforestation of a stand and convert it to non-forested vegetation (Hagle 2004). In the older, over-mature stands described in the Clearwater Forest Plan, Appendix H, root rot is not a significant component of the stand, but rather a small portion concentrated in older, over-mature trees.

## **Wildlife**

*72. The final Environmental Assessment needs to include a summary of environmental consequences to wildlife with supporting evidence. The supplementary Wildlife Effects report is helpful, however, is difficult to follow in places, lacks supporting evidence, and the cumulative effects analyses are incomplete. ([1-25])*

**Response:** Environmental assessments (EAs) do not require environmental consequences. The Stray Creek project preliminary EA includes the required components of EA per 36 CFR 220.7 and incorporated supplemental wildlife effects analysis per 36 CFR 220.7(b)(2)(iii) and 40 CFR 1502.21 (document 22-004).

*73. The Tribe requests that the Forest incorporate a design feature to minimize impacts to fisher habitat because the long-term consequences of timber harvest could be 100 to 150 years, which is the time required for stands to develop into a mature or older condition and snags to develop into a condition that provides habitat for species that prefer older forest conditions. ([1-13])*

**Response:** Habitat for the fisher would remain present and available within the analysis area during and after the project implementation. However the fragmentation level would slightly increase from the project. Since nearly two-thirds of the analyzed area is located in private lands, it is unlikely the Middle Lolo HUC12 that was analyzed would ever meet the recommendations of the desired habitat metrics (Sauder 2014, Sauder and Rachlow 2015). Mature fisher habitat considered by researchers (Sauder and Rachlow 2014) is considered as trees greater than 10 inches diameter at breast height (dbh). On this Forest, that diameter could be attained by a tree seedling in about 40 years. Old growth will be managed according to Forest Plan direction. Fishers are not restricted to old growth for their life cycle.

*74. Due to its geographic location and adjacent landowners, the Tribe is concerned about habitat fragmentation and cumulative impacts to wildlife habitat from the proposed action. ([1-2])*

*75. Like the Lolo Creek Insect and Disease Project, the Stray Creek wildlife also analysis makes several erroneous conclusions that are not supported by the best available science and fails to answer the "so what" question of what habitat losses associated with the project mean. In many instances the analysis underestimates potential habitat and in turn potential impacts to those species. Most of the analysis is based on stand exam or Vmap database queries and there is a general lack of monitoring data to confirm any of the conclusions of the analysis. Spatial requirements of territorial species have not been considered and no thresholds of management activity have been set for most species. With the exception of summer habitat use by elk, the impact of high levels of motorized use has not been considered for any species. The examination of cumulative effects is also very weak for most species. ([7-21])*

76. *The analysis assumes the project will not contribute to cumulative habitat losses at the Forest level, when the Nez Perce/Clearwater has no idea what the cumulative impact of numerous past and proposed projects are having on the species of concern. Right now the Forest Service is trying to significantly increase the amount of logging across the Nez Perce/Clearwater National Forest and numerous projects are in the works (French Larch, Lower Orogrande, Parachute Fuels, Northside Powell, Orogrande Community, Gold Hill, Crane Creek, East Saddle, Lowell WUI, Clear Creek, Johnson Bar, Pete King, Smith Ridge, Hungry Ridge, End of the World, Center Johnson, Little Boulder, Clear Creek, East Saddle, Windy Shingle, Tinker Bugs, White Pine, etc.). Little regard has been given to the impact of all of this activity on fish, wildlife and water quality. Like Stray Creek and Lolo Insects and Disease, none of these proposals ever causes any negative impact to fish and wildlife. ([7-23])*

**Response:** The affected environment/existing condition located in the project record discusses each species, using current and applicable science, and how the analysis for potential habitat was determined (document 22-004). The wildlife effects analysis provides the amount of habitat in the analysis areas for each species, the boundaries of analysis, and the anticipated effects of the proposed activities on each species analyzed, including cumulative effects. The size of the area considered for analysis differs among species, as some require more space than others. Some species are analyzed at a larger scale than the project area, such as the elk where the analysis areas is based on Forest Plan direction for elk; and there are larger territories for species such as the gray wolf and fisher. For example, the Middle Lolo Creek HUC12 has been analyzed for fisher because it is of the size that may accommodate a fisher territory. However, analysis of the habitat shows that private ownership is nearly two-thirds of this HUC. Available mature habitat is below the threshold suggested by research (Sauder 2014, Sauder and Rachlow 2014 and 2015). Contiguous fisher habitat is adjacent to the project area and provides displacement habitat for an individual to retreat to. A recent Forest-wide query calculated over one million acres of fisher habitat on the Clearwater National Forest that is about 505,000 acres are mature habitat. Thereby, the forest would still maintain habitat for territories, forage, and shelter for the mammal. The cumulative effects of the proposed project and effects of other actions is disclosed that occur within the same temporal and spatial area.

77. *the Project area contains high nutritional capacity for elk and meets the characteristics of the model, (Id. at 10; Rowland et al. (2018).) but the effects discussion does not circle back to this model or even appear to use this model to analyze impacts to elk habitat. If the model is applicable, the Tribe would like to know pre- and post-project results with respect to the Rowland elk habitat model. ([1-7])*

**Response:** With consideration of comments and current Forest Plan direction, the analysis and supporting documentation has provided information that focuses on motorized access, openings, hiding cover, security and potential competition with livestock that is evaluated by the elk guidelines mandated by the Forest Plan (Servheen et al. 1997) (document 22-004). Rowland et al. 2018 has been considered but will not be used in the Stray Creek analysis because the Forest Plan requires the guidelines in Servheen et al. 1997. The Forest has met with some of the authors of this monograph to discuss elk nutrition on the NP-CNF, and other variables that affect elk on the Forest.

78. *For fisher, the Tribe requests that the Forest take a hard look at the impacts to fisher habitat, including, but not limited to, an evaluation of habitat at the subwatershed scale. Based on this hard look, the Tribe requests that the Forest develop design features to minimize or avoid impacts to fisher if necessary (e.g. retention of old/late structure forest patches beyond what is required by the Forest Plan). ([1-8])*

**Response:** Habitat analysis for the fisher is at the subwatershed scale and has been updated (EA p. 19; document 22-004).

79. *To gain a better understanding of proposed actions and environmental consequences, the Tribe requests that the Forest report wildlife and sensitive plant species observations in the Project area to establish presence, compare the no action and proposed action for each wildlife species, and provide maps of the following:*

- modeled habitat for each wildlife species overlaid with treatment units and roads;
- old growth;
- existing and desired habitat types;
- extent of insect and disease infestations;
- forest cover within and in proximity to the Project area; and
- modeled elk habitat as referenced in the Wildlife Effects report. ([1-9])

**Response:** Few records of wildlife sightings in the project area were found in forest databases. The wildlife analysis includes the existing condition as the baseline for effects and modelled habitat is explained for each of the species analyzed for project effects (document 22-004). Information for old growth, insect and disease, and forest cover is in the forest vegetation section of the EA and supporting documentation (EA pp. 10-14; document 11-013). No old growth would be affected by the project; no harvest is proposed in old growth. Interagency guidelines for elk analysis (Servheen et al. 1997) were used according to Forest Plan direction (EA. 31). All habitat in the analysis is considered elk habitat except for roads. The analysis uses habitat models. Analysis of a no action alternative has been documented in the EA (p. 18) and supporting information located in the project record (document 22-004). Two sensitive plant species have known occurrence records and additional potential habitat within the project area: *Cardamine constancei* and *Cypripedium fasciculatum* (document 15-001). There are several additional sensitive species with potential habitat within the project area, but no known occurrence records. Although two sensitive species occur within the project area, records are not within planned treatment areas.

80. *There is concern that the project design feature WL-2 would not minimize impacts to the suite of migratory birds or other wildlife that use less than "large" stick nests and cavities that are not "obvious." The Tribe requests that the Forest consider revising or including another design feature to minimize impacts to migratory birds. ([1-12])*

**Response:** In addition to WL-2, design criteria WL-1 may limit spring burning in areas of potential nesting migratory birds. Of the 839 acres in the project area, about 50% would be affected by project activities; leaving over 400 acres of the potential habitat. No project activities would occur in old growth, or riparian areas. As documented in the EA and wildlife effects analysis the proposed action may impact individuals or their habitat, but is not expected to result in a loss of viability in the planning area, nor cause a trend toward federal listing of migratory birds, because the short period of timber operations, and design criteria (WL-1, and 2) would maintain potential habitat and minimize disturbance during the period of migratory bird presence in the area.

81. *The draft wildlife specialist report indicates that Forest Service will not document project effects to grizzly bears because the forest is considered "unoccupied" habitat (Page 1). As illustrated in the following table, there are a growing number of documented movements of grizzly bears into the Nez Perce-Clearwater National Forests and adjacent portions of the Idaho Panhandle National Forests. We believe that these movements necessitate effects analysis for grizzly bear as part of this and all future projects on the forest. ([4-7])*

**Response:** There are no records of the grizzly bear presence in the project area at this time. Grizzly bears

have been sighted on the Forest, but their activities have not demonstrated long-term residence on the Forest. Therefore, the spontaneous visits are not considered as occupation of an area. Verification of successful reproduction is one of the elements required before an area can be considered as occupied habitat. Presently, there are no such areas; therefore no requirement to analyze for grizzly bears (document 22-007).

82. *GMU 10A has one of the highest on-Forest open motorized road and trail densities at 3.3 miles per square miles in the NPCNF. The Stray Creek project is on the boundary of NPCF lands. Lands adjacent to the Stray Creek project boundary have large patches of regeneration harvest and extensive road and trail networks. We recommend project design and implementation be aimed to improve and/or maintain effective elk security habitat. We appreciate that the project outlines no net gain of open motorized roads and trails within the project boundary. Additional considerations may be needed to ensure no illegal motorized use of decommissioned temporary roads following project completion. ([5-1])*

**Response:** The Clearwater Forest Plan direction is to evaluate project impacts on elk using interagency guidelines (Servheen et al. 1997). Elk analysis units/areas (EAA) are used (3,000-11,000 square acres) for project analysis. The analysis includes existing condition and post (after project is completed) condition of the following in an EAA: road densities, hiding cover, security cover, openings, and cattle presence (number of cows and time period on an allotment). Therefore, the scale of effects on elk at this level are different than those on the GMU scale. In summary, the project would increase elk forage habitat, short-term decrease in security, and road density increase (with opening increasing along roads). Elk Vulnerability in the GMU remains unchanged (document 22-004).

83. *Fishers have exceptionally large home ranges and it is unlikely that this individual project will affect fisher populations. However, it should be noted that there is strong overlap between the NPCNF Front Country (i.e., E1-designated timber harvest managed lands) and modeled core high-quality fisher habitat (Sauder 2014), suggesting that frequent and/or large-scale timber removal may be at odds with fisher habitat requirements. When developing projects, adjacent land management and the larger landscape should be considered within the context of fisher habitat. Western red cedar (Thuja plicata), a highly sought after timber species, is thought to be a particularly critical component of fisher habitat in north-central and northern Idaho. Therefore, prescriptions designed to maintain an effective western red cedar component for fisher habitat are appropriate. ([5-2])*

**Response:** The fisher analysis area includes a large portion of private lands (Middle Lolo HUC12). Most of the western redcedar is located in RHCAs that will be retained per PACFISH. As documented in the wildlife effects analysis the project may impact individuals or habitat but will not likely contribute to a trend towards federal listing or cause a loss of viability to the fisher population or species.

84. *Schultz (2010) outlined most of these problems in a critique of Forest Service wildlife analysis. Schultz found that the Forest Service often relies on stand exam queries to determine acres of suitable habitat, but then makes no interpretation as to what that loss of habitat means to the species. Similar to what has been done on the Stray Creek and Lolo Insect and Disease project; they fail to set meaningful thresholds and assume that habitat losses are insignificant. Schultz (2010) concludes that "the lack of management thresholds allows small portions of habitat to be eliminated incrementally without any signal when the loss of habitat might constitute a significant cumulative impact." ([7-22])*

**Response:** Schultz points out that the court finds the USFS use of habitat measurement for a species viability is appropriate: "the forest will maintain viable populations of vertebrate species in the planning

area, generally understood to be the entire forest (USFS 1987). To comply with the USFS's viability requirement, the Ninth Circuit federal appellate court has deemed it appropriate for the agency to use measurements of habitat availability as a proxy for direct measurements of population status (see *Inland Empire Public Lands Council v. USFS* [1995]). The agency also can use surrogate species as proxies for other species. This has been called the proxy-on proxy method and is still valid practice in the Ninth Circuit (*Lands Council v. McNair* [2008 en banc])."

85. *It is over 30 years since the current Forest Plan was signed, yet there is currently no statistically reliable monitoring information on the impacts of Forest Service activities on any wildlife species of concern. With the possible exception of elk (populations monitored by the Idaho Fish and Game) and the North Idaho Elk Guidelines, there is no habitat proxy that is being used on the Forest that has any field verification. For example, it has not been confirmed that old growth standards are truly protecting old growth-related species like the fisher, goshawk, pine marten and pileated woodpecker. ([7-24])*

**Response:** Information on species is gathered from observational data and periodic reports: wolf, elk, moose, migratory birds, furbearers, Region 1 reports (goshawk, flammulated owls, etc.). Also, the Forest may use periodic reports on threatened and endangered species and complies with FWS direction for maintaining habitat and addressing potential project activities that may affect such a listed species. Photo monitoring stations on the Forest have captured images of wolverine and fisher in the past two years. Winter bald eagle surveys are conducted each winter.

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86. *The Forest Service is fond of the argument that viability cannot be discussed at the project level, but they then use habitat numbers outside of the project area to defend excessive development within the individual project area. They rationalize that sufficient habitat is available in other areas to make up for losses within the project area. Under this scenario, no project ever creates a significant impact and species are lost by "10,000 cuts" as project after project is allowed to proceed. The Forest Service cannot have it both ways; either they need to have project designs that create minimal impacts to species of concern, or they need to have monitoring information that confirms their habitat proxies are "providing for a diversity of plant and animal communities based on the suitability and capability of the specific land area" as required by the National Forest Management Act. ([7-25])*

**Response:** Some research on species provide an estimate of the animals' territory. This may be the preferred area an individual uses for all its needs; or it may be a territory for a limited period, such as a nesting or denning period. Viability is greater than one territory or one animal and it concerns the species. That is why this project level analysis is not of sufficient to discuss viability of the analyzed species.

87. *In the Lolo Insect and Disease project it was reported that existing openings account for 7% of the project area and that openings would be increased to 11% under the selected alternative. This would likely decrease the relative probability of occurrence of fishers from around 62% to 39%, which would be an expected drop in habitat quality of 23%. The amount of mature forest would drop from the current level of 50% to 48% under the Lolo Insect and disease project. The Stray Creek project will add another 425-acres of regeneration harvest to the Lolo Insect and Disease project area and presumably decrease mature forest by a similar amount. This is an*



*additional 0.5% increase in open habitat across the 72,781 Lolo Insect and Disease project area and is an example of how the Clearwater Forest is willing to place sensitive species at risk in order to increase timber production across the Forest.*

*Numerous other projects such as Hungry Ridge, End of the World, Center Johnson, Little Boulder, Clear Creek, East Saddle, Windy Shingle, etc. take a similar tact and have also reduced open area below the 5% threshold suggested by Sauder and Rachlow (2014). This is particularly concerning given the fact that most of these sales are occurring in the historically heavily logged "front country" that supports the most productive fisher habitat and the most productive forest stands on the Nez Perce Clearwater National Forest. ([7-26])*

**Response:** The analysis of fisher is at the sub-watershed level and includes cumulative effects of other actions within this analysis are that occur within the same timeframe, as well as likelihood that this potential territory for the fisher may not be the most preferred area (document 22-004).

88. *The project area is much too small to properly evaluate impacts to goshawk habitat and does not consider the cumulative impacts of ongoing activities like the Lolo Insects and Disease Project. Any evaluation of impacts should be at least the size of a goshawk home range and needs to include the impact of surrounding projects on goshawk habitat. ([7-27])*

89. *Moser (2007) and Moser and Garton (2009) reported the mean home range size of males with successful nests (N=4) had an average home range size of 9,657 acres and females with successful nests (N=8) had an average home range size of 6,600 acres. Male bird home range size increased as the number of openings in the home range increased and the amount of closed canopy forest decreased, but these factors weren't significant for female birds. Studies in other areas have reported smaller home range sizes in the neighborhood of 5,000-6,000 acres (Reynolds et al. 1992). Any evaluation of goshawk habitat needs to consider these findings and the home range size of a successful female goshawk (6,600 acres) is likely the most appropriate since Moser and Garton's data was collected in Northern Idaho and home range size for male goshawks can be significantly influenced by the number openings. ([7-28])*

**Response:** The wildlife effects analysis considers the literature of Moser and other research. Moser (2007) found that the average nesting area in his study was around 170 hectares, or 420 acres. The potential nesting habitat (38 acres) is located in small fragmented patches of less than 1 acre, and up to 10 acres. It is scattered in small patches that are not old growth or represent a closed canopy that would protect a potential nest from predators such as a red-tailed hawk or great horned owl. None of these patches are over an acre in width. Moser's 2007 study mentions that timber harvest did not affect goshawk nesting attempts if at least 16 acres of potential nesting habitat remains following harvest. Due to the openness and lack of structure, this area proposed for timber management is highly unlikely to affect potential nesting habitat.

90. *The preliminary EA suggests there are only 38 acres of existing nesting habitat in the project and that only 6 acres of this nesting habitat will be impacted by the proposed project. Given the fact that 45% of the 840-acre project area is composed of stands that have an average DBH of 15-20 inches and that there will be 425 acres of regeneration harvest in mature forest stands, this doesn't make any sense. ([7-29])*

**Response:** Active nest trees discovered by the biologist on this and other forests were over 20 inches dbh with a canopy cover over 60%. The biologist queried stands in the Project Area for tree size of 20 inches or greater, as this is the most likely size of a nest tree on the Forest. 38 acres were found which represent the most likely place for a nest to occur, as the trees are large enough to support a nest and provide hiding cover from potential predators. The stands of average sized trees of 15-20 inches dbh are not necessarily the best or most likely area a mating pair of goshawks may select if better habitat is available.

91. Moser and Garton (2009) reported that all goshawk nests examined in their study area were found in stands that had an average DBH of overstory trees that was over 12.2 inches and all nest stands had > 70% overstory tree canopy. They described their findings as being similar to those described by Hayward and Escano (1989). Hayward and Escano reported that nesting habitat "may be described as mature to overmature conifer forest with a closed canopy (75-85% cover)...." ([7-30])

**Response:** Agree on the literature discussion. The average dbh of the stand would include the trees of size that could support a nest structure. However, stands averaging this size class could also lack a 20" dbh tree: they could be a plantation of 50-70 year old trees that are 15 inches in size, and lacking the structure to support a goshawk nest. Analysis for stands with good potential for nest tree potential led to the model query of tree size greater than 20 inches dbh. Such habitat is present in the Stray Creek project area, but it is too fragmented or lacks the size for the findings as mentioned above.

92. Recommendations for the management of goshawk habitat (Reynolds et al. 1992) are available and should have been used in the analysis. These guidelines suggest that at least 180 acres of suitable nesting habitat be maintained in each goshawk home range. Nesting habitat is to be maintained in uncut blocks of at least 30 acres in size and these can be scattered around the home range. Post-fledgling areas (420 acres in size) are to be maintained around each nesting stand and these post-fledgling areas are supposed to contain at least 60% older uncut forest. This recommendation fits well with the findings of Moser and Garton (2009) who found that alternate nest sites will be used within the home range if the previous year's nest site is lost for some reason. Moser and Garton (2009) experimentally clearcut nest stands after the nesting season (average harvest unit size 104 acres) and compared use with unharvested nest stands. They found goshawks, re-nested when approximately 39% of the post-fledgling area (164 acres) remained as potential nesting habitat. Based on their experimentation, they suggested post-fledgling mature forest cover could be reduced to 39% instead of the 60% figure recommended by Reynolds et al. (1992). However, these experiments were conducted on industrial forest lands and may pose greater risk to the species than would be appropriate for National Forest lands. ([7-31])

**Response:** Refer to the affected environment/existing condition located in the project record for the relevant literature used in the goshawk discussion. Again the size of existing blocks do not meet the minimum size recommended in this literature. Reynolds et al. 1992 is not listed, as more recent and pertinent literature is available.

93. The preliminary EA predicts that there will be minimal impact on the pileated woodpecker because there are only 45 acres of pileated nesting habitat in the project area and only 6 acres of that nesting habitat will be impacted by the proposal. These numbers seem very low given that the vegetation analysis suggests that 45% of the 840-acre project area has average DBH between 15-20 inches and over 425 acres of timber harvest is occurring within the project area. Some stands with an average DBH between 15-19.9 inches likely include individual snags/trees exceeding the 20-inch diameter size category usually reported as the minimum size for nesting by this species (Bull and Holthausen 1993, McClelland and McClelland 1999) and timber harvest likely will target stands in these larger size classes. ([7-32])

**Response:** As documented in the affected environment/existing condition in the wildlife effects analysis (document 22-004), the nesting habitat for the pileated woodpecker was analyzed at by the existence of nest trees greater than 20 inches dbh, and canopy cover between 30 to 60% (Aney and McClelland 1990; Bull and Jackson 1995; Bull et al. 1992; Bull & Holthausen 1993; Bonar 2001). Stand size class is not used for the determination of the woodpecker's nesting habitat.

94. *Pileated woodpeckers are reported to have home range sizes of approximately 1005 acres (Bull et al. 1992). Thus the 840-acre project area is slightly smaller than the typical pileated woodpecker home range and could potentially support one nesting pair of pileated woodpeckers. The proposed project will harvest 425-acres of mature forest in one large harvest unit, which is approximately 50% of the project area. This large block will remain unsuitable for foraging or nesting by pileated woodpeckers for 100-150 years as the new trees mature into size classes suitable for nesting and/or foraging. ([7-33])*

**Response:** The project area hosts a very minor component of habitat that would offer potential pileated nesting habitat. About 68 acres of contiguous nesting habitat is available adjacent to the project area and would offer displacement habitat. So, portions of the Stray Creek project area may occur in a home range of an adjacent or overlapping territory, but the Stray Creek project area does not have the size or habitat to be considered a pileated woodpecker home range. Recruitment foraging habitat is available adjacent to the Stray Creek project area and retained snags as well as future snags in the project area created by wildfire or insect and disease outbreaks would provide foraging habitat.

95. *Guidelines are available for the management of pileated woodpecker habitat (Bull and Holthausen 1993), but these guidelines have not been considered in the analysis for this project or the adjacent Lolo Insect and Disease proposal. These guidelines recommend that approximately 25% of the home range be old growth and 50% be mature forest. They suggest that 50% of the area should have stands with greater than 60% canopy closure and at least 40% should remain unlogged (any type of logging). Follow up work (Bull et al. 2007) found that pileated woodpecker density did not change in 30 years (despite major infestations of spruce budworm) in home ranges meeting these guidelines, unless extensive regeneration harvesting (like that proposed on the Stray Creek project and the adjacent Lolo Insect and Disease project) had occurred in the home range. They defined extensive regeneration harvest as 25% of the area. They also examined nesting success and found that birds that successfully produced young had on average 85% of their home range unlogged and less than 15% logged (any type of logging including fuel reductions). Whereas unsuccessful nesters had 62% of the home range unlogged and 38% logged (Bull et al. 2007). Using the guidelines, it appears the project area would likely become unsuitable for successful nesting by pileated woodpeckers as a result of the proposal and that pileated woodpeckers would have to move to adjacent areas to find suitable habitat. This is likely true for several other areas of concentrated timber harvest in the adjacent Lolo Insect and Disease project area. Like the Stray Creek analysis, the Lolo Insect and Disease project was not spatially explicit in regard to the impact on individual pileated woodpecker home ranges. Conclusions on both projects suggest that sufficient habitat will be available in other areas of the Forest to provide for viable populations of the pileated woodpecker. ([7-34])*

**Response:** The Stray Creek project area is not currently providing the attributes documented in Bull and Holthausen 1993. The affected environment/existing condition documents scientific literature regarding pileated woodpecker's habitat, size of nest trees, feeding habitat, size of nesting territories, and secure population status in the state.

96. *Little consideration has been given to the fact that nearby areas on State and Private land have already been compromised by extensive timber harvest and that a great deal of new activity is being proposed in other areas across the Forest. Clearly, the best available science does not support the contention that pileated woodpeckers will be unaffected by the Stray Creek and Lolo Insect and Disease projects. Several potential home ranges will be compromised by these two projects and other previously mentioned proposals that are occurring across the Forest. At some point, the impact to the pileated woodpecker and other species that depend on older forests is*

*going to become significant. ([7-35])*

**Response:** The wildlife analysis discusses the potential impacts of activities to the woodpecker (about 5 acres of potential nesting habitat would be harvested. Forest Plan Standards for maintaining old growth and snag habitat is in Appendix H of the Clearwater Forest Plan and consistency with these standards is documented in the EA and the forest vegetation and wildlife analysis documentation located in the project record. Project design criteria WL-2 would retain trees with cavities or nests.

*97. The preliminary EA reports that the current elk habitat potential is 47% according to the "Interagency Guidelines for Evaluating and Managing Elk Habitats and Populations in Central Idaho". (Servheen et al. 1997). According to the analysis there is no change in elk habitat potential during the project and after the project is completed there is an actual improvement in elk habitat potential to 48%.*

*With 425-acres of regeneration harvest in one unit, opening of several closed roads and the construction of four miles of temporary road this makes absolutely no sense. The large 425-acre harvest unit will include several areas that are more than 500 feet from adjacent cover. These areas will largely be unavailable to elk due to their reluctance to stray far from forest cover. Habitat deductions are supposed to be made to the elk habitat model when forage is over 500 feet from cover.*

*The cutting will also remove hiding cover from adjacent roads and this will increase the impact of those roads on elk habitat potential according to the model. On another recent project (Little Boulder Creek), I found that deductions to habitat quality were not being made when vegetation adjacent to roads was being removed. This is a major error in the elk habitat calculations, and it is unclear if this correction has been completed for the Stray Creek project. Despite claims to the contrary in the wildlife report, there are no copies of the elk habitat potential calculations available to the public at this time. The lack of a decline in elk habitat potential would suggest that no deductions have been made for the removal of cover adjacent to roads.*

*Finally, reconstruction of 6 miles of closed road and the construction of 4 miles of temporary road should have made some difference to the model (at least during the life of the project). Opening of these roads should have negatively affected the adequacy of security areas and the single large harvest unit should have negatively affected the size and distribution of forage areas. ([7-36])*

**Response:** The project record includes a table for the Yakus EAA based on elk habitat effectiveness modeling (22-005). During project implementation: road density increases, the percentage of elk security drops and openings increase. The percent of elk habitat effectiveness (EHE) remains the same as the existing condition due to the increased openings (more potential forage for elk) offset the changes of road density and security that is reflected in the supporting elk analysis data located in the project record. Post project implementation, all temporary roads will be obliterated; which returns road densities to the existing condition. Security improves compared to during implementation, but not to the same level as the existing condition, as less hiding cover is now in the Stray Creek project area. However, the newly created openings from harvest contribute to the increase in EHE to 48%. Elk and other big game have been observed foraging in open areas during the hours of darkness.

*98. Also, increasing the area with early seral species will eliminate habitat for species that rely on mid-to-late seral species. ([9-12])*

**Response:** Mid-to-late seral species persist in riparian and other untreated areas. In time- recovering vegetation would continue succession up to the mentioned seral stages.

*99. The agency has provided no maps of many of the analyzed species' modeled habitat, which leaves*

*the public with not much to scrutinize until more information becomes available. ([9-25])*

**Response:** The analysis uses models for generated in a GIS program.

100. *Why doesn't the "preliminary environmental assessment" have an analysis for the sensitive species? For the endangered or threatened species, for the species where listing may be warranted? ([9-32])*

**Response:** The wildlife analysis in the project record documents those species not analyzed. Page 12 of the preliminary environmental assessment refers to supporting analysis information located in the project record. This supporting analysis information includes the effects to sensitive species and was published along with the preliminary environmental assessment on the Stray Creek project webpage.

101. *We are prejudiced from commenting much on elk because of the paucity of information provided, none of which is analysis and all of which are conclusions. The Forest Service maintains that the proposed action would increase openings within the Yakus elk analysis area by 12%. Please map out this elk analysis area. We expect an accurate environmental baseline in the analysis area with the projects that have occurred in this as well as an analysis using the correct coefficients for roads next to hiding cover and roads next to open areas. What are the cumulative effects to the elk habitat effectiveness in light of the various projects in the same analysis area? ([9-33])*

**Response:** There is supporting information and data on the Yakus elk analysis area (EAA) located in the project record. It displays the existing, during and post-project conditions for motorized roads or trails, livestock presence, openings, security, etc. Cumulative effects (roads & openings) are analyzed within the Yakus EAA.

102. *The agency stated that there is habitat for fisher in the analysis area. (The project comprises "all but 93 acres" of fisher habitat.) Yet, the Stray Creek "Wildlife Effects Analysis" had no analysis—it only stated the agency's summary of the current science on fisher, which includes recognition that the species needs complex forest areas and tend to avoid logged openings. In the wildlife effects analysis, the agency recognized that "In summary, the most current science for the Nez Perce-Clearwater National Forest recommends landscapes that have greater than 50% mature forest arranged in contiguous, complex shapes with few isolated patches, and open areas comprising less than 5% of the area appear to constitute a forest pattern occupied by fishers (Sauder 2014, Sauder and Rachlow 2014)." Based on the science that the agency has recognized and the fact that there isn't a record of logging in some of these areas (and other areas might be fairly old harvest areas), there likely will be an impact on fisher. ([9-34])*

**Response:** The wildlife effects analysis documents the amount of fisher habitat to be affected by the Project activities (document 22-004). The cumulative effects section includes effects of activities proposed in the analyzed territory; which includes effects of those activities in the Lolo Insect and Disease Project.

103. *What monitoring has been done on fisher in this forest recently? Has the agency found this species in the project area? Have any surveys been conducted? What is the evidence that this project, when added to the others in the Clearwater that have also eliminated fisher habitat, would not contribute towards a trend towards listing? How will the agency maintain over 50% mature tree habitat? Please explain. ([9-36])*

**Response:** The wildlife effects document in the project record mentions a record of a fisher trapped and released in the project area during 1989. A current IDFG biologist (J. Sauder) conducted fisher research near or in this project area in the past decade. Other surveys have occurred on the forest, and fisher have been detected on the forest in areas adjacent to this project (document 22-023). Habitat to support sensitive species is measured at the Forest level, not project by project.

104. *We would like an analysis of impacts in the environmental assessment on Long-eared and Long-legged Myotis, Western Toad, northern goshawk, pileated woodpecker, shiras moose, flammulated owl, pygmy nuthatch, American marten. What have been the most recent surveys and monitoring for these species? Are they found in the project area? ([9-37])*

**Response:** Habitat is present in the Stray Creek project area for the flammulated owl, pygmy nuthatch and fringed myotis, but none of the habitats would be affected by the proposed project activities. Therefore, these 3 species were dropped from further analysis. The other species have been analyzed for direct, indirect, and cumulative impacts. The preliminary environmental assessment incorporated this document by reference that is located in the project record (and was published to the project webpage as the preliminary environmental assessment was published); and the American marten has been analyzed as well.

## Aquatics

105. *The Project EA states Yakus Creek has moderately high steelhead density of "(5 fish/100 m<sup>2</sup>). (EA at 15.) What is the source of this information? Snorkeling data from the Idaho Department of Fish and Game ("IDFG") in 2017 (IDFW. 2017. Snorkeling Data. Unpublished data.) reports two sites having 5.5 and 6.4 fish per 100 m<sup>2</sup>, respectively, which is an average 5.95 fish per 100 m<sup>2</sup>. Also, an omission from this EA statement is that 5.5 and 6.4 fish per 100 m<sup>2</sup> are the highest steelhead densities recorded in the Lolo Creek watershed during the 2017 IDFG surveys (n=31 sites). ([1-14])*

**Response:** The relative densities of steelhead to the remainder of the Lolo watershed were not presented in the EA due to the IDFG sampling scheme which only snorkeled a fraction of the known steelhead distribution in the watershed. In addition, the study does not compare data from other years, therefore a conclusion about the importance of Yakus in relation to the remainder of the drainage cannot be made. Project design features are expected to limit effects to steelhead and their habitat (EA pp. 27-28).

106. *The EA states Yakus Creek has Westslope cutthroat trout,18 but fails to indicate that Stray Creek also has cutthroat trout based on 2019 eDNA results. Please update the final Environmental Assessment with this information. Tribe encourages the Forest to use best available scientific information and recent field data that verifies fish presence/absence in the Project area. The Aquatic Species section also lists other Region 1 sensitive species saying Pacific lamprey and interior redband trout are not present (Id), but omits mentioning spring/summer Chinook salmon presence in Yakus Creek, which were also identified in the 2017 IDFG snorkel surveys. ([1-27])*

**Response:** The Forest was not aware that eDNA data for Stray Creek was available. The information will be included if the Forest can acquire the data prior to the release of the final EA. IDFG sampled 2 stations in Yakus Creek in 2017, neither of which indicated chinook presence according to the data we received.

107. *Cobble embeddedness ("CE") was 45 percent when measured at the Forest boundary in 2016 (Id. at 14). The Tribe recommends that CE be measured pre- and post-implementation of the Project to demonstrate that the proposed action meets the 1993 Lawsuit Settlement Agreement21 by not adding measurable amounts of sediment to Yakus Creek at the Forest*

*boundary. The EA states that "[t]he project would meet the 1993 Lawsuit Settlement Agreement as it would not add measurable amounts of sediment to Yakus Creek at the Forest boundary." (Id. at 18). How is this statement compatible with "[p]roposed harvest and fuel reduction activities do have the potential to increase erosion and sedimentation over base levels until ground cover is re-established (approximately 5 years)" (Id. at 13) even with the proposed design criteria and best management practices implementation? ([1-16])*

**Response:** The EA (pp. 25-26) goes on to say that Forest monitoring data shows that PACFISH buffers are effective at protecting streams from harvest-related sedimentation.

108. *Stray, Rat, and Yakus Creeks are listed in Idaho's 2016 Idaho Integrated Report in Category 2 as fully supporting the assessed beneficial uses of cold water aquatic life, salmonid spawning, and secondary contact recreation. ([3-2])*

**Response:** Thank for your comment.

109. *The aquatic species section of the preliminary EA suggests that Yakus Creek is currently not meeting Forest Plan fisheries objectives due to cobble embeddedness. However, impacts are largely dismissed based on the idea that harvest units will not produce any sedimentation due to PACFISH buffers. Conclusions are largely based on the incomplete watershed analysis, that includes no modeling or quantitative evaluation of temporary road construction, reconstruction existing roads, impact of skid trails, risk of landslides, removal and replacement of existing culverts, timber haul and other likely sediment producing activities. ([7-12])*

**Response:** No measurable sediment from project activities are expected based on local field-based monitoring which indicates no sediment delivery from timber harvest or temporary road construction (USDA, unpublished data, 2016). Twenty-eight miles of PACFISH buffers and 3.1 miles of temporary road were monitored in the study. Recent science was also used to assess potential effects (preliminary EA pp. 27-28).

110. *The scoping document indicates that aquatic habitat surveys were conducted in 1997. Has the Forest Service conducted anything more recent?([ 9-59])*

**Response:** No recent habitat surveys have been conducted in Yakus Creek.

## **Watershed**

111. *The Tribe recommends a robust watershed analysis of sedimentation from all the roads physically existing on the landscape, as well as potential sedimentation from log hauling, increased traffic, and temporary road construction associated with the Project. This analysis would provide an overall estimate of the sediment generated by this Project and identify potential problem areas so they can be addressed with road improvement, long term storage, or full recontour road obliteration. ([1-18])*

**Response:** Results of road modeling are presented in the EA based on previous road modeling in the area completed for Lolo Insect and Disease. In addition, WEPP:Road was completed for all Stray Creek project roads in the project area including the haul routes that are outside the defined project boundary. The results of the WEPP:Road Analysis are in the project record. While there are no road removal projects planned to mitigate existing sediment levels as a part of the project, road drainage improvements are planned as a part of project work to mitigate potential sediment from project activities. The Forest relies on effective implementation of BMPs for the harvest and road work, implementation of Design Criteria, and PACFISH buffers to prevent sediment delivery into streams.

112. *The preliminary environmental assessment also states that sediment levels in Yakus Creek currently exceed Forest Plan objectives (Page 13). However, the Forest Service did not give a value for sediment levels at the Forest Service boundary nor did the agency state for how long sediment levels have been above objective. This information is critical to determining compliance with the Forest Plan as it outlines acceptable limits for percent over natural sediment as well as the number of years (out of 30) that the Forest Service is allowed to exceed objectives. In this case, the Forest Service can exceed water quality objectives in Yakus Creek for no more than 10 years out of 30, and above Rat Creek, no more than 20 years out of 30. ([4-10])*

**Response:** Yakus Creek does exceed Forest Plan thresholds for sediment as measured by Cobble Embeddedness. Cobble embeddedness was 45% when measured at the Forest boundary in 2016. This exceeds the desired condition of less than 30%. We do not have enough data points to provide a recent trend analysis for Yakus Creek, but Forest Plan monitoring completed in 1997 showed that Yakus Creek was meeting Forest Plan Standards with a sediment threshold of 25%.

113. *The preliminary hydrologic analysis uses the Middle Lolo HUC 12 watershed to evaluate water yield conditions and drainage road densities, but no information is presented on the water yield and road density in Yakus Creek which is the primary Forest Plan drainage associated with the proposal. Using the larger Middle Lolo HUC 12 watershed to evaluate water yield and road density dilutes impacts of increased water yield and high road density within Yakus Creek. According to the National Marine Fisheries Service (1998) an existing ECA (equivalent clearcut acres) of less than 15% is generally indicative of good or high-quality stream condition, 15-20% is considered indicative of moderate quality stream condition and ECA of greater than 20% is indicative of low or poor-quality stream condition in HUC 6 watersheds. Similarly, road densities of less than 1 mile per square mile is considered high-quality, 1 to 3 miles per square mile is considered moderate-quality and greater than 3 miles per square mile is considered low-quality. Given the amount of past activity in the Yakus Creek drainage on both federal and non-federal lands and the additional activity proposed on this project and the Lolo Insect and Disease project it is very likely that water yield conditions will or already exceed 20% ECA and 3 miles per square mile thresholds that have been identified by the National Marine Fisheries Service. Without this data, it is impossible to know how Yakus Creek is being impacted. ([7-4])*

**Response:** The parameters assessed in the NOAA Matrix of Pathways and Indicators (NOAA 1998) are based on the HUC12 (formerly HUC6) level, therefore comparing the matrix conditions to the smaller Yakus drainage (HUC14) is not appropriate.

As noted in the EA p. 26, current ECA for the Middle Lolo HUC12 is 18% and proposed activities may increase it to 22%. It remains within the moderate condition category as shown in the NOAA matrix. Forest Roads make up 53% of the total road miles in the Middle Lolo watershed with the remaining on private and state lands. While road densities are above desired conditions, past decommissioning on Forest lands has reduced their effects. A total of 18 miles of road have been decommissioned in the Yakus drainage with 4.7 miles occurring within the project area. The Forest recognizes the effects of RHCA roads and, of the 18 miles already decommissioned, 11.5 miles were within RHCAs. As noted in the EA p. 25, location has the largest influence on sediments effects with ridgetop roads posing less of a risk than midslope or riparian roads.

114. *Assumptions of the watershed analysis are very questionable. The idea that all sediment impacts will be short-term and cause no long-term impacts is unrealistic and not supported by any data. No sediment analysis is provided in the preliminary environment assessment for Yakus Creek which is a stream that already exceeds Forest Plan standards for sedimentation. Activities in such streams must be designed to have no measurable effect to instream sediment (Forest Plan*



*Lawsuit Settlement 1993). ([7-5])*

**Response:** No measurable sediment from project activities are expected based on local field-based monitoring which indicates no sediment delivery from timber harvest or temporary road construction (USDA, unpublished data, 2016). Twenty-eight miles of PACFISH buffers and 3.1 miles of temporary road were monitored in the study. Recent science was also used to assess potential effects (EA p. 25).

115. *The project includes 6 miles of road construction that will include replacement of 9 live stream crossings, installation of cross drains, road realignment or reshaping, road fill placement and the placement of surface gravel. There will be also be approximately four miles of temporary road construction that will remain open until the completion of fuel treatments and reforestation. Temporary roads could remain open for several years until these activities and the actual obliteration is accomplished. The preliminary environmental analysis does not include any scientifically based analysis that includes modeling or other accepted techniques for predicting the amount of sediment that will enter the stream as the result of these activities. Conclusions provided in the environmental analysis that there will be no measurable increase in sedimentation to Yakus Creek as a result of the proposal are largely based on subjective statements regarding past monitoring and incorporation of PACFISH buffers. ([7-6])*

**Response:** To clarify, the proposed action conducts 6 miles of road reconstruction. WEPP:Road was completed for all Stray Creek project roads in the Project Area including the haul routes that are outside the defined project boundary. The results of the WEPP:Road Analysis are in the Project Record. In addition to WEPP modeling, the potential addition of sediment from roads is based primarily on local monitoring and recent science with special emphasis on BMPs applied to road-related activities (EA pp. 25-26, 27-28).

116. *PACFISH buffers do not stop sedimentation once it gets into the stream. Much of the proposed logging and fuel treatment will be conducted with ground based heavy equipment. Use of such equipment will create skid trails that will link directly to existing roads and road ditches. Construction of temporary roads and reconstruction of existing roads create a similar situation since PACFISH buffers do not intervene between these facilities and the existing ditch line. During storm events sediment will be created from areas of exposed mineral soil that are common on skid trails, machine piled areas, existing roads and temporary roads. System roads generally are located at the base of most tractor harvest units. Skid trails are usually planned to enter the roadway from upslope areas often traversing the cut-bank of these roads at steep gradients and terminating in large excavated areas that are created to accommodate the landing of logs and loading of trucks. There are no PACFISH buffers between the skid trail, landing and the system road at the bottom of the harvest unit. Sedimentation from these facilities (ski trails, landings and temporary roads) connects directly to existing roads and drainage ditches. These in turn are linked to small streams that can carry sediment to larger fisheries streams. Machine piling creates similar impacts as heavy equipment moves from the road into the harvest unit and back to the road. Areas of exposed mineral soil are common following machine piling. PACFISH buffers will not stop sediment once it reaches the ditch line. ([7-7])*

117. *PACFISH buffers do not stop sedimentation from reaching the stream because sedimentation can reach roads and be directed down ditches and through culverts. ([9-50])*

**Response:** The majority of yarding and skidding will occur in the uphill direction toward temporary roads and away from streams and PACFISH buffers (Fig. 3, EA, p. 6). The only exception is existing graveled Road 5104-A which crosses through a small portion of a buffer. There is a thick vegetative buffer between the road and stream and the area is flat, which would minimize the potential delivery to Stray Creek. BMPs would also be implemented to minimize delivery. Where Road 454-A crosses streams (Fig.

3, EA p. 6), buffers will be in place and cross drains added to divert sediment away from streams.

Proposed road improvement activities (EA, p. 5) are expected to divert road-related sediment away from streams. These activities are supported by recent science cited in the EA, pp. 25-26. No measureable amount of sediment is expected to reach streams, and this is in compliance with the 1993 Settlement Agreement (EA p. 31)

118. *Impacts from temporary and permanent have no restorative value and need to be quantified in the sediment analysis. Most sedimentation from the construction of these new facilities will occur in the first year of construction and will continue at reduced rates until the facilities are decommissioned. Any sediment created by these facilities that reaches the drainage system will remain there and cause additional long-term impacts until it can be routed out of the drainage. Once routed out of the local drainage, the sediment will continue to cause downstream impacts in larger systems like Lolo Creek. The idea that these new impacts are short-term and will somehow improve the already impacted drainages is self-serving and not based on fact. The new impacts will only serve to further degrade the existing situation. Reconstructing or reconditioning of existing roads and replacing several existing culverts could have restorative value as suggested in the EA, but there is no calculation of the actual benefit of this work. Opening a grown over closed roads is likely to produce more sediment than leaving them alone. A sediment analysis is needed to quantify the actual benefits of this work, rather than assuming that the overall impact will be beneficial without any analysis. ([7-8])*
119. *The sediment analysis should consider impacts from temporary and permanent roads, as well as existing road prisms/templates. We expect this analysis to demonstrate that it has considered temporary and permanent roads, all road prisms in the project area, and the increased precipitation in the form of rain on the project. ([9-51])*

**Response:** Minimal delivery of sediment to streams from temporary roads or road reconstruction is expected based on local monitoring and recent science with special emphasis on BMPs applied to road related activities (EA pp. 25-27).

The culvert replacements would occur on a currently native surfaced road. After the culverts are replaced, gravel will be placed over the crossing to reduce potential sediment delivery from use of the road. This is an improvement over the existing condition on roads needed for haul. More importantly, culvert replacements reduce the potential for future crossing failure and large quantities of sediment delivery to streams.

Local monitoring has shown no delivery of sediment to streams from temporary roads because they are designed to have no stream crossings or connectivity to streams (EA pp.5). Proposed road reconstruction activities are expected to divert road-related sediment away from streams. GRAIP-lite modeling in 2019 showed only 6% of the haul roads having a potential to deliver sediment to streams. These will be addressed through road reconstruction activities.

120. *Please provide monitoring and evidence that the past road decommissioning has provided beneficial impacts and that watershed and stream conditions are improved. ([9-58])*

**Response:** Habitat conditions related to sediment are improving on Forest managed lands in the Lolo Creek drainage even with continued management. Reductions in cobble embeddedness from 2017 to 2019 were observed in Eldorado Creek (22% in 2017 down to 17% in 2019), Musselshell Creek (38% down to 23%), Lolo Creek just above Eldorado (24% down to 11%), and Lolo Creek just above Yoosa Creek (51% down to 30%) (documents 20-022 through 20-029). Desired conditions for cobble embeddedness are <25% (Espinosa, 1992). High spring flows in 2017 and again in 2019 were primarily responsible for

flushing sediment, which has likely been stored in the watershed for decades, out of the system.

121. *The EA suggests that past road decommissioning has provided beneficial impacts to the watershed and stream conditions have already improved, but no data is provided to back up these claims. By the Forest Service's own omission, Yakus Creek is still not meeting Forest Plan standards and it appears that the Forest Service is trying to take credit for road obliteration work that has been accomplished by the Nez Perce tribe with funding from the Bonneville Power Association. That funding is designed to mitigate for habitat losses associated with the Snake River dams and it is not to be utilized to offset sediment production that results from new timber sales or new road construction. ([7-9])*
122. *Like the EA watershed section, the fisheries report takes credit for previous road decommissioning. It is assumed that most of this existing work would have to be accomplished by the Nez Perce tribe with Bonneville Power Association funding. Watershed improvements that result from the use of this funding cannot be used to justify more timber harvest and new road construction. ([7-13])*
123. *Where is the funding coming from to decommission the temporary roads? It shouldn't be the Bonneville Power Association, because that funding is meant to mitigate for dams, not to bolster the Forest Service's habitat-degrading activities. ([9-52])*

**Response:** A total of 18 miles of road have been decommissioned in the Yakus drainage, 11.5 miles of which were RHCA roads. The preliminary EA, p. 27, states that decommissioning has removed potential sediment sources, not that stream conditions have measurably improved as a result of decommissioning. Measurable improvements can take years to occur and are generally dependent on high spring flows to flush the sediment out of the system. However, the removal of dozens of culverts and recontouring of road surface has eliminated the potential delivery of sediment from them.

In order for the Tribe to receive BPA funds, matching funds are required and provided by the Forest Service. A detailed review of proposed projects is conducted by the BPA prior to distributing funds to the Tribe. Had the projects not met Northwest Power Act requirements, funds would not likely have been provided. No measurable sediment from project activities are expected based on local monitoring which indicates no sediment delivery from timber harvest or temporary road construction (USDA, unpublished data, 2016).

Temporary roads are decommissioned under, and paid for by, the timber sale or other service contracts.

124. *What road prisms or road templates are on the landscape? Do these road prisms still have compact soils? The agency needs to analyze for the possibility that temporary roads will not be decommissioned, or that they will be decommissioned as "road prisms" or "road templates," only to be recommissioned at later dates when the agency again wants a temporary road. The analysis should address impacts to aquatic resources as well as soil issues. How is the agency going to decommission temporary roads? ([9-16])*

**Response:** The EA states that the existing road density is 3.2 mi/mi<sup>2</sup>, which is considered high from a watershed condition rating system used by both the Forest Service and NOAA Fisheries and the existing system roads will have compacted road prisms. Additional system road decommissioning will not occur as a part of the Stray Creek project; however, design Criteria SR-9 requires that all temporary roads will be decommissioned at the conclusion of project activities by a prescription of recontour.

125. *What will be the cumulative impacts to the watershed analysis from the newly decommissioned roads in the Lolo Insects and Disease project? ([9-20])*

**Response:** We do not expect cumulative impacts resulting from the proposed road decommissioning the Lolo Insect and Disease project. The proposed road decommissioning in Lolo Insect and Disease will not occur at an overlapping time for potential effects. Further, based on results from extensive previously decommissioned roads, no sedimentation into streams is expected from the Lolo Insect and Disease road decommissioning.

126. *The project area lies within the Middle Lolo subwatershed and the scoping document will directly impact "Stray Creek, Rat Creek, and Yakus Creek. Stray Creek and Rat Creek are a second order tributaries to Yakus Creek and Yakus Creek is tributary to Lolo Creek." PA p. 15. The agency admits that Yakus Creek exceeds Forest Plan objectives for sediment. Because of excess sediment, the forest plan lawsuit settlement requires there to be no measurable increase. The scoping document doesn't offer an analysis; it offers a prediction based on no analysis. There isn't even quantifiable measurements of the existing condition. To sum up, this section does not disclose measurements of the existing condition and it does not have an analysis (which should take into account logging and road operations), but it does have a conclusion that appears to be based on mere speculation. ([9-44])*

**Response:** Quantified measures for existing conditions for sediment and watershed factors are presented in the EA pp. 25-26 and 27-28. Cobble embeddedness measures showed that forest plan sediment desired conditions are exceeded (EA p. 27). A brief discussion of potential effects is also presented (EA pp. 25-27). The conclusion for potential effects two water quality is based on local monitoring and recent science related to the effectiveness of BMPs, especially those related to road use (EA pp. 25 and 27). The application of BMPs is expected to result in no measurable direct or indirect effect on sediment or other water quality parameters.

127. *We expect that analysis to be explained in an understandable way and use models that have been verified and are appropriate for the analysis. The Forest Service should use something like GRAIP-Lite to model sediment delivery (if that is an appropriate watershed model) or a sediment delivery model that is an appropriate watershed model to model for sediment from road use and should include the road use from the cumulative effects from the Lolo Insects and Disease Project. The agency used this sediment modeling for the BA in the Lolo Insects and Disease Project for sediments from road use. In any event, the agency should validate all models it uses. ([9-45])*

**Response:** The 2019 GRAIP-lite model runs used in the Lolo Insect and Disease Project showed 0.5 miles of the 8.5 miles of haul road in the Stray Creek Project as having potential to delivery sediment (Roads 514-N, 495 and 454-A). These segments would be addresses through the addition of cross drains to divert road related sediment away from streams.

Road sediment models are typically used to identify potential sediment delivery locations so that treatments may be applied at those locations. The actual model outputs (tons/year) are not used for the analysis. The models help to visually pinpoint potential problem locations. WEPP:Road was completed for all Stray Creek project roads in the Project Area including the haul routes that are outside the defined project boundary (document ). The results of the WEPP:Road Analysis are in the Project Record.

128. *The agency must also count sedimentation from the haul generated by the Lolo Insects and Disease project, which will use some overlapping roads. Some of the culvert replacements in this area seem to serve that project as well as this one, so the increased use of hauling from two different projects in this area should be considered on road and water resources. ([9-49])*

**Response:** Modeling with WEPP:Road does take into account the increased traffic on the shared haul

routes for the two projects, which will as you note have concurrent log hauling in some cases. The increased traffic does increase the potential for sedimentation. The Forest has increased road maintenance and improved road drainage through the construction of cross-drains to reduce the potential for sediment delivery as a result of the increased traffic. The overlapping haul routes have gravel surfacing on the roads to reduce erosion as well.

## Soils

129. *The preliminary environmental assessment indicates the no g round-based skidding will occur on slopes greater than 45% (Page 6). This seems like a very liberal limit. We encourage a more conservative limit for ground-based skid ding, particularly where friable soil types exist. In fact, instead of prescribing a uniform slope limit, we encourage the Nez Perce-Clearwater to set slope limits for ground-based skidding that are based on the soil types that are present on the forest. ([4-9])*
130. *Why is timber harvest by ground-based equipment being allowed on slopes between 35 and 45% when past operations have shown that tractor harvest on such steep slopes has led to increased ground disturbance and sedimentation? When harvest is conducted by tractor on such steep slopes it is often necessary to construct excavated skid trails that cause unnecessary resource damage and there is a much greater risk to the safety of operators. ([7-11])*

**Response:** Soil project design feature SR-2 has been clarified to disclose when ground-based equipment may be allowed on steeper slopes (between 35 and 45%) (EA, Table 1 on p. 7). Ground-based equipment is allowed on slopes between 35 and 45% only where it is determined that soils will be protected and erosion risk minimized. One way that this is accomplished is through the implementation of shovel logging as an alternative harvest system. Ongoing forest monitoring shows that shovel logging on steeper slopes poses less risk of ground disturbance and sedimentation than tractor skidding, as excavated skid trails are unnecessary for this harvest system, and the ground-based equipment makes fewer passes over the soil. Tractor skidding will continue to only be allowed on slopes less than 35% in gradient, as stated in the updated wording of project design feature SR-2. These slope limitations are used in conjunction with soils analysis of detrimental soil disturbance (DSD), which is a standard measure of soil disturbance indicators, including erosion. As such, the project complies with all Clearwater National Forest Plan soil standards, the Idaho Forest Practices Act, and is projected meet the regional standard of 15% maximum detrimental disturbance spatially per activity unit.

131. *It is mentioned that the proposed 425-acre regeneration harvest unit does not include and high-risk landslide prone areas, but it is s unclear if reconstructed roads or new temporary roads occur on high risk landtypes. Roads and timber harvest should not be planned in areas with high and very high landslide risk. One slide could introduce more sediment into the drainage than the entire project and pose a real risk to the threatened and endangered aquatic species that live here. ([7-10])*

**Response:** Temporary roads would not be built on landslide prone areas and no harvest would occur on any field-identified areas. Portions of existing roads may occur on landslide prone areas; however, the addition of cross drains is expected to minimize potential slides from the roads. One road related landslide occurred in the Yakus Creek during the 1995/96 flood events (McClelland et al. 1997). It did not deliver sediment to the stream.

132. *Will reconstructed roads or temporary roads on high-risk land types? Please consider Barik et al. 2017, which predicts that areas prone to landslides are shifting under altered climate conditions and analyze that. ([9-53])*

**Response:** There are no temporary roads on landslide prone areas. Portions of existing roads (0.5 miles of Road 454-A, 0.3 miles of Road 514-N and 1.1 mile of Road 514) lie on a high mass wasting potential landtype. One road-related landslide occurred in the Yakus Creek during the 1995/96 flood events (McClelland et al. 1997). It did not deliver sediment to the stream. The likelihood of road-related slides is considered very low; especially when given road reconstruction activities that will improve drainage.

133. According to the agency, 62% of the project area has been disturbed by anthropogenic causes, including fire suppression, grazing, and timber harvest. The agency also mentioned a lot of road prisms/templates on the landscape. What is the compaction of these road prisms/templates? What is the detrimental disturbance in the project area now? How does that contribute to the cumulative effects from past and ongoing projects? ([9-54])

**Response:** The EA, pp. 22-23 states that detrimental soil disturbance from past harvest and road-related activities is minimal and that negative effects on soil productivity are not expected from the proposed project activities. Recent field surveys for detrimental soil disturbance (DSD) show that detrimental disturbance is minimal (0% for all proposed harvest units) (documents 17-002 and 17-003).

### Sensitive Plants

134. What are the sensitive plant species growing in the Project area? What are the existing conditions and environmental consequences with respect to noxious, invasive plant species in the Project area? ([1-25])

**Response:** Two sensitive species have known occurrence records and additional potential habitat within the project area: *Cardamine constancei* and *Cypripedium fasciculatum*. There are several additional sensitive species with potential habitat within the project area, but no known occurrence records. Although two sensitive species occur within the project area, records are not within planned treatment areas. Environmental consequences with regard to noxious, invasive plant species within the project area will be largely dependent upon how well design criteria are followed. In general, *Cypripedium fasciculatum* should not be impacted by these species because it requires undisturbed habitats where these species are not known to flourish. Where potential habitat for *Cardamine constancei* exists within proposed treatment areas, potential populations may compete with noxious, invasive species after management activities - if noxious and invasive populations become established.

135. The preliminary environmental assessment seems to indicate that surveys for rare plants will not occur before this project is approved by the responsible official (See page 7 where it states, "Known rare plants or sites will be avoided or protected during project implementation."). We believe that all harvest units should be surveyed and protected as needed before final approval. Depending on the time at which harvest takes place, some rare plants may not even be visible depending on their life cycle or life history. Therefore, harvest units may need to be surveyed more than once depending on the habitat types present and the potential for some rare plants to be present or absent at different points in the growing season. ([4-6])

**Response:** Potential habitat was modeled using known occurrence records, habitat indicators, and botanical knowledge for each sensitive species within the project area as part of the preliminary environmental assessment. FS staff will identify or be trained in the identification of botanical and subsequently protect additional populations that are found prior to and during harvest unit layout, and prior to implementation.

136. You state that, for botanical resources, that "impacts to known occurrences of Region 1 sensitive plants would be minimized or eliminated by avoiding those areas." But, the scoping document does not mention which plants are there. So, which plants are present? Have they been surveyed

*or monitored recently? When was the last survey/monitoring? How have they responded to logging in the past? What are their forest-wide abundance levels and when was this last assessed? ([9-39])*

**Response:** Two sensitive species have known occurrence records and additional potential habitat within the project area: *Cardamine constancei* and *Cypripedium fasciculatum*. These populations were monitored in the summer of 2019. There are several additional sensitive species with potential habitat within the project area, but no known occurrence records. Although two sensitive species occur within the project area, records are not within planned treatment areas.

Very little potential habitat for *Cardamine constancei* exists within the planned treatment areas due to its lower elevation requirements. However, it is an early-seral species that is likely to respond well to disturbance and low-moderate burns within its habitat. An estimated 223 acres of potential habitat for *Cypripedium fasciculatum* exists within the project area, 109 of this within proposed treatment areas. Potential habitat for this species is difficult to predict with much specificity beyond “mid-late seral forests” and may be artificially high due to relationships with mycorrhizal fungi that are not well understood and difficult to model. Within treatment areas, if populations exist, it is likely that they will be extirpated by proposed management activities. However, this loss of potential habitat will reduce the likelihood of stand replacing fire within the entire project area, which would destroy all habitat.

Forest-wide surveys and species assessments are conducted opportunistically when timing and funding allows. More often, species are assessed on a project by project basis and populations are assumed stable unless a major disturbance occurs in a location where a known population of a sensitive species exists. Currently, over 100 known populations of *Cardamine constancei* and over 80 known populations of known populations of *Cypripedium fasciculatum* exist across the Forest.

## **Invasive Species**

137. *What are the potential effects of noxious weed populations, introduced by logging, roadbuilding, and increased grazing? ([9-40])*
138. *Please analyze how effective noxious weed measures, including what currently exists in the area, and how so much road construction and timber harvest proportional to the acres logged might contribute to the spread of these weeds. ([9-56])*

**Response:** The Stray Creek project has potential to spread weeds to some degree because of ground disturbing activities associated with timber harvest, temporary road construction, and prescribed burning. When combined with ongoing disturbances associated with livestock grazing, recreation use, and road maintenance, the project has the potential to increase the rate of noxious weed spread. The risk of noxious weed introduction is greater when the proposed project activities are within close proximity to existing infestations and a seed source. The level of expansion depends directly on how well design criteria are followed. Pioneering weeds such as thistles can be initially expected to occur in any burned areas with bare soil. Accurate data on exactly how fast each weed species would spread in response to ground disturbing actions is not available as weed models do not distinguish between differing categories of disturbance. It is estimated, however, that 1 to 10 percent of the activity acres would experience weed establishment following treatments. With rigorous application of design criteria and monitoring, the expansion would be closer to one percent. With poorly implemented design criteria, expansion would be closer to 10 percent.

## **Range**

139. *When was the last update to the Yakus-Pete King allotment plan? Are there any unsatisfactory conditions within the allotment or Project area due to livestock grazing? Are there any potential*

*conflicts between the proposed actions and livestock grazing? ([1-25])*

**Response:** Grazing was not assessed as no cumulative effects were expected when combined with proposed activities. The Yakus-Pete King pasture is located within the Eldorado Canyon Allotment. An update of the entire allotment was conducted in 2005 (Eldorado Allotment EA) and included a reduction in the number of Animal Unit Months (AUMs) from 75 to 67 for the 14,100-acre pasture. No conflicts between the project and grazing activities are expected. Regeneration units may provide additional forage for cattle in the allotment; however, cattle spend the majority of their time on or near roads.

## **Climate Change**

*140. What is the impact of your actions on climate change? You should consider this at a regional level. Also, because of climate change, the agency needs to assess whether the tree composition it is aiming for is actually feasible.*

*What are the impacts of this project on carbon storage? What are the cumulative effects of this project and other regional projects on carbon storage? ([9-38])*

**Response:** In the short term, the proposed action would remove some carbon currently stored in live biomass by cutting timber in the treatment units. In the proposed action, slightly more carbon would be stored in wood products than in biomass. In the long term, the forest will be regenerated to longer-lived disease-resistant species and accumulate carbon, thus acting as a carbon sink. The proposed reforestation in the proposed action would help ensure these forest stands return to a carbon sink as quickly as possible. Motorized equipment used during the proposed action would emit a small quantity of greenhouse gases, but the impact that this would have on the atmospheric CO<sub>2</sub> concentration is not considered here in detail because its contribution is relatively small, difficult to determine, and cannot be appropriately analyzed at the project scale. The affected forest lands in this proposal would remain forests, not be converted to other land uses, and long-term forest services and benefits would be maintained. As such, the long-term cumulative effects of forest management will have little impact overall on a potential future scenario of carbon accumulation and loss. See the carbon cycling and storage analysis located in the project record for more details. See also response to comments 45, 56, and 63 on tree composition in terms of climate change.

## **Roads**

*141. Based on the proposed action map, it appears two roads scheduled for use were previously obliterated (454A and 5104A). The Tribe has justifiable concerns about reopening roads which were decommissioned in partnership and would like confirmation of this action. ([1-17])*

**Response:** Field verification resulted in the finding of the 454-A road intact (not recontoured); but with culverts pulled. Records indicate that the 454-A road was put into long term storage and is closed. A portion of the 5104-A road was decommissioned; with about a quarter mile placed into long-term storage (closed).

*142. The Stray Creek Project calls for decommissioning 4 miles of temporary roads. An intact road system is critical to the management of Forest Service land, particularly for the provision of timber products. Without an adequate road system, the Forest Service will be unable to offer and sell timber products to the local industry in an economical manner. The road decommissioning proposed in the scoping notice likely represents a permanent removal of these roads through either obliteration or recontouring and likely the deferral of management of those forest stands that they provide access to. The land base covered in the Stray Creek Project area is to be managed for a variety of forest management objectives. Removal of adequate access to these lands compromises the agency's ability to achieve these objectives and is very concerning to us.*



*Recommendations provided in the Road Investment Strategy (RIS)\* will likely be a starting point for the District to consider road infrastructure needs. The RIS directs the agency to analyze roads for decommissioning where "the resource risk from these roads potentially outweighs the access value and the road is very unlikely to be needed for administrative use in the future." The Strategy also directs the agency to analyze roads for closure where "the resource risk from these roads potentially outweighs the access value, but the road may be needed for administrative use in the future."*

*AFRC recognizes that the number of roads and their status can and does impact potential water quality. However, we would like the District to carefully consider the following three factors when making a decision to decommission any road in the project area:*

- Determination of any potential resource risk related to a road segment.*
- Determination of the access value provided by a road segment.*
- Determination of whether the resource risk outweighs the access value (for timber management and other resource needs).*

*We believe that only those road segments where resource risk outweighs access value should be considered for decommissioning ([6-13])*

**Response:** The decommissioning of temporary roads in this project does not preclude the re-use of these road locations for future projects. Also, given the regeneration type harvest proposed with this project the use of these road would not likely be needed for 40 plus years when planted trees following the timber harvest reach commercial size.

143. *Stray Creek with add 6 more miles of road reconstruction and four miles of new temporary road. Even with decommissioning after use, temporary roads will provide travel corridors that may be accessed as user created routes. This has been observed on many past projects, and it may be difficult to maintain effective closures on these roads due to the lack of funding and inadequate law enforcement. Many "temporary" roads have been observed to be still open in other areas of the Forest (Little Boulder project and others) long after the timber sale that was supposed to close them was completed. ([7-20])*

**Response:** Temporary roads constructed with this project will be recontoured after use. To aid with controlling access and erosion, 4-8 tons of logging slash will be placed on the recontoured prism to prevent motorized use.

144. *If the planned haul route uses Forest Highway 100/Glenwood Road 150 to Kamiah, we need to look together at options. Currently, the 100 Road asphalt surface is deteriorating badly. Without considerable work, this may cause extended periods of seasonal haul restrictions. One option may be to work together quickly on a Federal Lands Access Program (FLAP) project to restore the asphalt surface prior to your proposed 2023 sale date. ([8-4])*

**Response:** The planned haul route for this project is the 100 road. We appreciate your knowledge and concern for the condition of this road. Entering into a FLAP project is outside of the scope of this project but with this project and many other projects that rely on the use of the 100 Road, a long-term solution for a re-surfacing project is needed.

145. *The agency states, "Surveys conducted prior to project implementation would occur to determine the actual work needed." We expect the results of these surveys to come out with the environmental assessment to be in accordance with NEPA. ([9-17])*

**Response:** The surveys referenced would be conducted following the decision for the development of a Specified Road package that would be a part of the timber sale package.

146. *What does obliteration consist of? Will road prisms remain? ([9-18])*

**Response:** Temporary road obliteration would consist of completely recontouring the road and a prism would not remain.

147. *What is the level of illegal motorized use in the area, what strategies will the agencies use to prevent illegal motorized use, and what are the effectiveness of those strategies? ([9-19])*

**Response:** Illegal motorized use is relatively uncommon primarily due to the steep topography of the area which does not allow for cross country travel. It appears that the gates and tank traps are effective.

## **Economics**

148. *AFRC is very supportive of the Project being developed to improve the economic conditions for the forest products industry and communities. Supporting local industry and providing useful raw materials to maintain a robust manufacturing sector should be a principal objective to any project proposed on Forest Service land. As the Forest Service surely knows, the "restoration" treatments that are desired on these public lands cannot be implemented without a healthy forest products industry in place, both to complete the necessary work and to provide payments for the wood products generated to permit the service work to be completed. Studies by the University of Idaho have shown that as many as 18 direct and indirect jobs are created for every million board feet of timber that is harvested. The 10.5 mmbf planned for harvest in this project will greatly help the industry and surrounding communities. ([6-1])*

**Response:** Thank you for acknowledging the positive economic effects of this project.

149. *The National Forests in Idaho are very important for providing the raw materials that sawmills within the State need to operate. The timber products provided by the Forest Service are crucial to the health of our membership. Without the raw material sold by the Forest Service these mills would be unable to produce the amount of wood products that the citizens of this country demand. Without this material, our members would also be unable to run their mills at capacities that keep their employees working, which is crucial to the health of the communities that they operate in. ([6-2])*

150. *AFRC is very pleased to see the Forest will allow ground skidding on slopes up to 45%. This will greatly help the economics of the project area, and coincides with the type of light touch ground skidding equipment currently being used. ([6-5])*

**Response:** Thank you for your comment

151. *As shown on Page 15 of your PEA, Economics, the positive Present Net Value is great. We request that you display how a conventional sale would contribute towards the 25% fund. Should SRS funding be reauthorized, this could be an optional decision. ([8-3])*

**Response:** If timber sold through this project were sold as a conventional sale, then 25% of the net revenue would go to the 25% Fund. It is the option of the county to decide whether they would like to receive payments via the 25% fund or through SRS if it were reauthorized.

## **Beyond Scope**

152. *Although beyond the scope of this decision, we also recommend that the Nez Perce-Clearwater National Forests adopt an order, requiring the storage of attractants, such as food, harvested game animal s and parts, pet food, processed livestock feed and grains and personal*

*hygiene items such as soap, toothpaste and deodorants on national forest lands. This would reduce the potential for human-cause mortality of grizzly bears on the forest. If for no other reason, requiring the storage of attractants would reduce the potential for the habituation and eventual conflict between people and black bears. ([10-23])*

**Response:** Thank you. Beyond the scope of this project, as noted.

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